

TEXTILE BULLETIN

VOL. 61

FEBRUARY 15, 1942

NO. 12



TIME IS SHORT!

THE Textile Industry is a War Industry, and in the Battle for Production, is holding a vital position in the front line. Clothing and bed covering and tents and surgical dressings are just as essential to ultimate victory as guns and tanks and bombers.

In supplying the enormous needs of our armed forces, the industry is faced with the biggest job in its history. Speed is the constant cry, and yet quality must be maintained to meet government specifications.

To meet this twofold requirement, more and more spinners are changing to U. S. Ring Travelers, because they know that these precision-made, long-wearing travelers will help them to do the job **RIGHT** and **ON TIME**.

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Sold under the Trade Names

BOWEN Round Point Travelers

BOWEN Square Point Travelers

BOWEN Improved Vertical Bronze

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BOWEN Patented Vertical Offset

BOWEN Flat Oval and Round Wire Travelers

U. S. RING TRAVELER CO.

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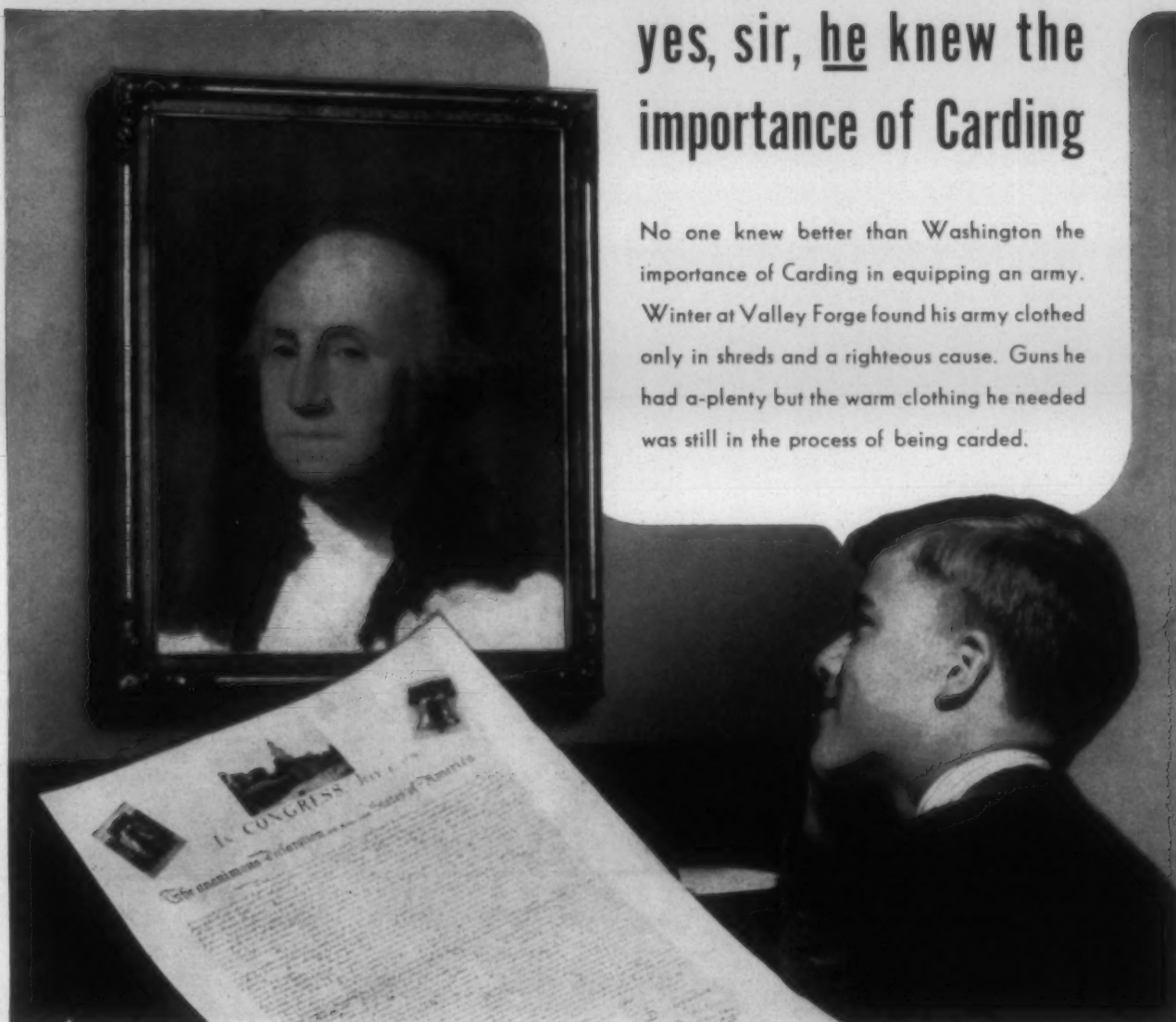
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A Traveler for Every Fibre



yes, sir, he knew the importance of Carding

No one knew better than Washington the importance of Carding in equipping an army. Winter at Valley Forge found his army clothed only in shreds and a righteous cause. Guns he had a-plenty but the warm clothing he needed was still in the process of being carded.

... and that wasn't all ...

Hand cards still had to be made and the process was painfully slow. Almost overnight cardmaking became a doorstep occupation. Throughout the colonies the fingers of women and children were sore from cutting, bending and inserting wire into leather ... all in a gigantic effort to step up carding production! ★ Today carding is no

less important. From presidents to superintendents to overseers the search will be increasingly frantic to find anything to step up production.

★ We at Howard Bros. are proud to offer products we believe will deliver the ultimate in trouble-free, high-speed production ... so essential for victory. Orders for card clothing made by the famous Tufferizing process are being filled as quickly as conditions permit. Check over your requirements and discuss them with our representative.

PRODUCTS

... Card Clothing for Woolen, Worsted, Cotton, Asbestos and Silk Cards • Napper Clothing, Brush Clothing, Strickles, Emery Fillets, Top Flats Recovered and extra sets loaned at all plants

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Lickerins and Garnet Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant • Midgley Patented, and Howard's Special Hand Stripping Cards • Inserted Eye and Regular Wire Heddles

Southern Plants: Atlanta, Ga., Gastonia, N.C. Branch Offices: Philadelphia, Dallas. Canadian Agents: Colwool Accessories, Ltd., Toronto 2

Step up production with

TUFFERIZED

CARD CLOTHING

Parachute Yarn

OR TARPAULIN DUCK?



FINE parachute yarns to heavy tarpaulin ducks—this represents the range of textiles the Rohm and Haas Laboratories are prepared to treat and finish.

Every problem submitted is studied and analyzed individually by competent textile technicians. The most promising solutions to the problem are then checked under controlled laboratory conditions.

Reproducible results are made possible only through such precision methods as the 24 hour conditioning period before testing.

CONDITIONING—Every fabric and yarn skein or package is first conditioned for at least 24 hours at 70° F. and 65% relative humidity. This preliminary process is carried out under automatically controlled humidity and temperature conditions in the Rohm & Haas Textile Evaluation Laboratory. The importance of this precautionary measure is emphasized and exemplified in the case of tensile strength determinations on rayon fabrics. In this case if conditioning is not employed the tensile strength may vary as much as 40% from day to day.

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA, PA.

Manufacturers of Leather and Textile Specialties and Finishes . . . Enzymes . . . Crystal-Clear Acrylic Plastics . . . Synthetic Insecticides . . . Fungicides . . . and other Industrial Chemicals



Shuttles Are Not Drapers

[illegible]

Spartanburg S C

ATWOOD'S POSITION

In the **VICTORY PROGRAM**



Plant of The Atwood Machine Company at Stonington, Connecticut

To the users of Atwood Machines and the fine yarns produced on Atwood Machines this statement of policy is made with full confidence that it will be accepted in the spirit with which it is presented.

1 Atwood resources — men, machinery and experience — will be employed without stint for the production of weapons and parts essential for victory, thus carrying on and expanding defense production commenced eighteen months back.

2 Atwood replacement and repair services will be maintained to the utmost limit of our ability, in order that your Atwood machinery may continue to function with maximum effectiveness however long and hard it may be used.

3 With your cooperation in obtaining the necessary priorities, Atwood Machinery essential for your production needs will continue to be furnished. It is our firm intention to be of maximum assistance to you throughout as well as after the emergency period.

4 Atwood engineers will never stop concentrating on their fundamental objective, both past and future, — constant improvement of Atwood machines. Every possible production and service assistance will be rendered to those who have made The Atwood Machine Company the leader in its field for nearly 100 years.

Your continued cooperation and support are deeply appreciated by every member of



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SALES OFFICES: STONINGTON • CHARLOTTE • LOS ANGELES • MANCHESTER, ENGLAND • BUENOS AIRES
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**BARBER-COLMAN
SYSTEM OF
SPOOLING
AND
WARPING**

MORE YARN-HANDLED EASIER

Trident Trucks and Transfer Tables

Save Time and Effort for Operators on Barber-Colman Spoolers



The Spooler girl removes full cheeses from the throw-out position and drops them onto the spindles of tridents on a small truck which she pushes along a track as she works. Full tridents are moved to the transfer table by an easy push--no heavy lifting is necessary. These convenience features help Barber-Colman Spooler operators to get out more work with less effort.

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THIS IS NO. 31 OF A SERIES ON

GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation



ROLLER BAIL FOR NYLON AND RAYON WITH HOSIERY TWIST (No. 50 Winder)

Throwsters that have been coning silk hosiery yarns with the No. 50 Pineapple Cone Attachment find that the requirements of nylon and hosiery-twist rayon necessitate changes in their equipment. The fixed Bail (A in Fig. 1) which was satisfac-

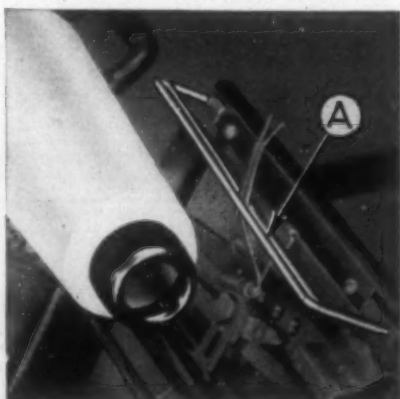


Fig. 1

tory for silk, is not suitable for nylon and high-twist rayon. Throwsters that have changed over to the patented Pineapple Cone Attachment with Roller Bail (B in Fig. 2), have been able to get a minimum percentage of rewinds when winding direct from sizing tubes of nylon; the same equipment can be used advantageously for high-twist rayon yarns.

The Roller Bail contacts the winding package and revolves in the same direction the yarn is traveling. Thus, in the case of nylon, there is no resistance on the part of the Bail to scrape off size — which will happen with a fixed Bail. In the case of high-twist rayon, the Roller Bail eliminates the danger of the twist being pushed back with a tendency to form kinks.

Pressure

Better package formation can be obtained when nylon is wound with more pressure.

If a fixed bail were used, this additional pressure would increase the scuffing of the yarn. But with the Roller Bail, the pressure, in addition to improving package shape, also serves to keep the Bail revolving.

The pressure can be thrown out of adjustment by the setting of the Traverse Frame Dog, so it is important to have as little tension as possible on the Dog — just enough to hold it in the Segment. Should the operator, after tying a knot, fail to return the Traverse Frame Back so that the Roller Bail will contact the package, the machine's vibration will cause a loosely-set Dog to slip, returning the Roller Bail to the package surface. If the Dog grips the Segment, it will prevent this creeping of the Traverse Frame Back, and the Bail will not revolve until the package diameter increases.

The Traverse Frame Back may show a slight weaving motion at the start of winding, caused by the paper cone being of uneven thickness or the spindle not running absolutely true. But this weaving is not serious when the Roller Bail is used.

It is always best to use the Pressure Gauge when making adjustments on each winding spindle. With the gauge hooked into the top of the Traverse Frame Back, the pressure at the start of winding should be between 12 and 14 ounces; at the finish of the cone, it should be 4 to 6 ounces.

Tension

Knitters prefer a cone that is not too hard, so it is desirable to wind nylon with the minimum amount of tension. If a fixed Bail is used, excessive tension is created by the friction of the yarn dragging over the Bail. The Roller Bail eliminates this drag and will produce packages of the proper density for knitting.

When setting the tension, a Tensometer should be used on each spindle. 4 to 6 grams is enough at the start of winding, and all tension should be released at the finish except for 2 to 4 grams produced by frictional contact. If excessive tension is used, it may be difficult to remove the package from the winding spindle.

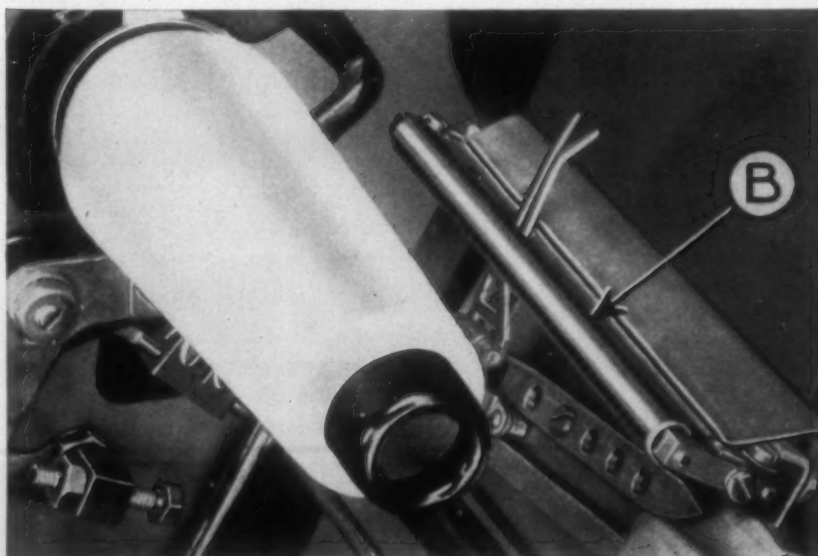


Fig. 2

See our Catalog in *TEXTILE YEARBOOK*

"THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED"

UNIVERSAL WINDING COMPANY
PROVIDENCE BOSTON PHILADELPHIA UTICA CHARLOTTE ATLANTA

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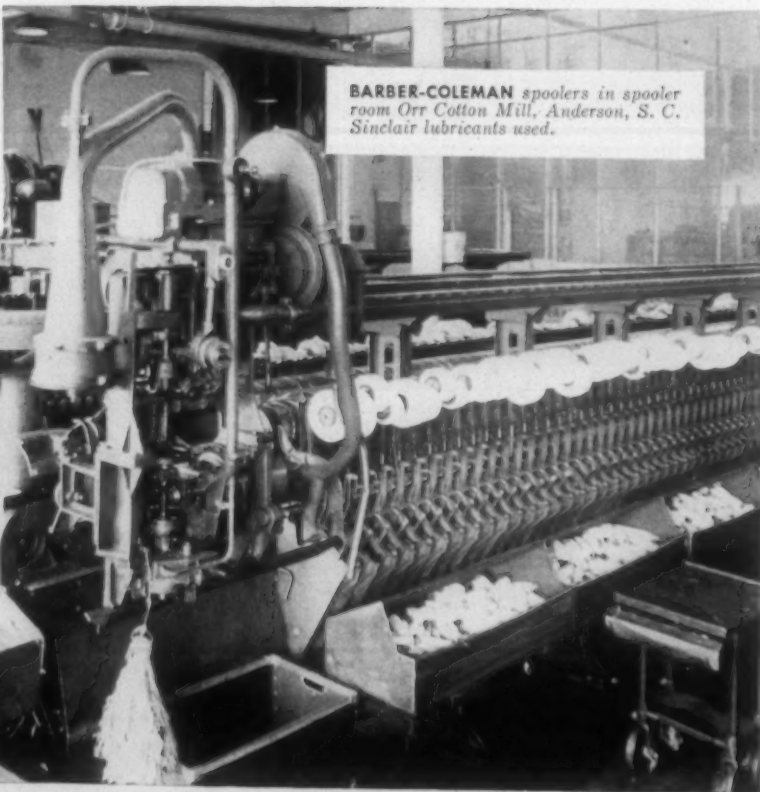
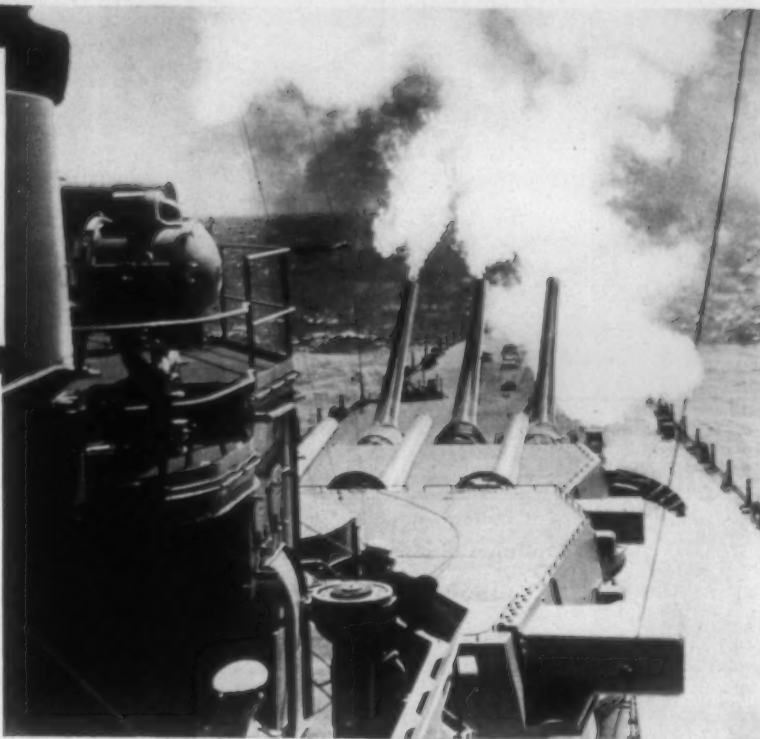
WAR PRODUCTION

tolerates no slow-downs. Don't allow inadequate lubrication to reduce productive machine hours. For TEXTILE MACHINERY there are . . .

...SINCLAIR LILY WHITE OILS and NO-DRIP LUBRICANTS . . .

oils for cool, no-drag, high speed spindle operation . . . lubricants with positive staying ability for top rolls. For complete information, or lubrication counsel, (including Knitting Machinery Oils) write nearest Sinclair office or Sinclair Refining Company, 630 Fifth Avenue, New York, N. Y.

Write for "The Service Factor"—a free publication devoted to the solution of lubricating problems.



BARBER-COLEMAN spoolers in spooler room Orr Cotton Mill, Anderson, S. C. Sinclair lubricants used.

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FT. WORTH



THE TEXTILE INDUSTRY MUST CONSIDER THE

Price Control Bill

THE Emergency Price Control Act of 1942 will have a direct bearing on all individuals and businesses in the United States. Some of the outstanding features of the act are listed below as of particular interest to textile concerns. Dr. Claudius T. Murchison, president of the Cotton-Textile Institute, prepared the following summary for distribution to members of the Institute.

1. The act is for a prescribed period and will automatically expire June 30, 1943, unless extended by act of Congress. It may be terminated prior to that date by Presidential proclamation or by concurrent resolutions of Congress declaring an end to the national emergency. Because of its preferred treatment of agricultural commodities and its failure to regulate wages it may fall considerably short of its major purpose, to prevent inflation. But apart from this qualification it imparts to the Price Administrator extraordinarily wide and sweeping powers. They reach all the way from the manufacturing and extractive industries to retail distribution. Maximum prices may be imposed in terms of "margins, commissions, fees and other charges and allowances."

2. In the determination of price ceilings the Administrator shall "give due consideration to the prices prevailing between October 1 and October 15, 1941." He shall make adjustments for certain relevant factors; "speculative fluctuations, general increases or decreases in costs of production, distribution and transportation, and general increases or decreases in profits . . . during and subsequent to the year ended October 1, 1941."

Before issuing any regulation or order, except those which are temporary, the Administrator is required to appoint and consult with an industry committee which is representative in character. The committee may have its own chairman and may initiate recommendations to the Administrator. Acceptance of committee advice and recommendations is not mandatory. The Administrator has the power to issue temporary price orders for periods of not more than 60 days pending the issuance of orders design to be permanent.

3. The Administrator is given the general power to regulate or prohibit speculative or manipulative practices,

or hoarding. The implications of this power are very broad because of the general meaning of the language used. However, it will no doubt be of more practical concern to secondary processors and distributors than to cotton mills.

4. The much discussed power to buy and sell remains in the Act with certain modifications. The Administrator may exercise this power to procure "maximum necessary production" of any commodity or to procure imports to offset production deficiency at home. He is also authorized "to make subsidy payments" to domestic producers to encourage greater production. In cases where "strategic or critical material" is involved the Administrator himself may not exercise buying and selling power, but such power is lodged in other appropriate Government agencies.

5. In the case of agricultural commodities, four criteria are set up for the determination of ceiling prices. No ceiling shall be lower than

- (1) 110 per cent of the parity price, or lacking parity, a "comparable" price.
- (2) The market price of October 1, 1941.
- (3) The market price of December 15, 1941.
- (4) The average price during the period July 1, 1919, to June 30, 1929.

Average farm price of cotton on October 1st was approximately 17.04c (farm prices are computed middle of each month); on December 15th, 16.23c and the average for the period 1919-1929 was 21.47c. 110% of parity on January 15th was 19.91c. Obviously, therefore, the average price of 21.47c prevailing in the 1919-1929 period is the lowest ceiling which can be set on cotton. Whether it goes above this point will depend on the parity trend.

Of great possible importance to cotton mills is Section 3(c) which provides that no price ceiling shall be set on any commodity processed from an agricultural product which will not reflect to producers of the agricultural product the highest price attainable in accordance with

(Continued on Page 50)

OPA Amendment Eliminates Some Premiums for Quality Yarn

PREMIUMS above established maximum prices for carded cotton yarn may not be collected on the basis of quality differences, according to an amendment to Price Schedule No. 33 (carded cotton yarn), issued February 5th by Leon Henderson, Administrator of the Office of Price Administration.

The amendment also contains several features added to Price Schedule No. 7 (combed cotton yarn), and clarifies conditions under which premiums may be collected for special twist and special breaking strength. Premiums based on quality alone are excluded by limiting premiums to those specifically authorized. Under the amendment tinged and part-waste yarns must sell at the normal trade differential below the ceiling prices.

The text of the amendments as issued is noted below:

TITLE 32—NATIONAL DEFENSE
CHAPTER XI—OFFICE OF PRICE ADMINISTRATION
PART 1307—RAW MATERIALS FOR COTTON TEXTILES
AMENDMENT NO. 3 TO PRICE SCHEDULE NO. 33—
CARDED COTTON YARN

Section 1307.51 is amended by deleting paragraph (B) thereof and redesignating paragraph (C) as paragraph (B):

Paragraph (B) of Section 1307.58 is amended; Section 1307.60 is amended; paragraph (E) is added to Section 1307.58; and Sections 1307.61 and 1307.62 are added to the schedule, to read as follows:

1307.58 definitions.

(B) "Carded cotton yarn" means carded cotton yarn of all qualities of the specifications for which maximum prices are established in Appendix A;

(C) "For export" means to a person outside the United States, its Territories and possessions.

1307.60 APPENDIX A.—Maximum prices for carded cotton yarn.

(A) Terms of sale.

(1) Freight.

(I) Sales and deliveries by producers.

As applied to sales and deliveries by the producer, the maximum prices established herein included freight up to 1 cent per pound to the purchaser's place of business. The producer may require the purchaser to pay any freight in excess of 1 cent per pound.

MAXIMUM PRICE LESS FREIGHT.

If the producer does not pay the freight, the maximum price shall be that shown herein less freight (up to 1 cent per pound) at the lowest published rate. In the case of sales or deliveries you export, if export is by sea, the seaport from which the yarn is shipped, or, if export is over-

land, the point at which the yarn leaves the United States, shall be regarded as the purchaser's place of business.

(II) Sales and Deliveries of Stock Yarn.*

As applied to sales and deliveries of stock yarn, the maximum prices established herein are prices f.o.b. the stock-yarn seller's shipping point.

*As used in this schedule, the term "stock yarn" means carded yarn owned by a person independent of the producer thereof and stored in space (1) belonging to or leased by such person and (2) located within 25 miles of his principal place of business; the term "independent" means not controlling, controlled by, or under common control with.

(2) Discounts and Commissions.

The maximum prices established by this schedule are gross prices before any discounts are deducted and they include commissions and all other charges.

The maximum prices for carded yarns established in paragraph (B) below shall be discounted by 2 per cent when payment is made within 30 days of delivery.

(B) Maximum Prices.

(I) Determination of Maximum Prices.

The maximum price for any offer to buy or sell, sale or contract of sale, delivery or transfer of carded cotton yarn shall be determined from (2) below, as qualified by (3) below, in the following manner:

(I) Offer to buy or sell. By the cotton spot price* of the business day immediately preceding that on which the offer was made except that, if the offering price is not otherwise specified, an offer to buy or sell at the maximum price applicable on the day the contract of sale is to be made shall not be a violation of the schedule.

*The term "cotton spot price," when used herein, means the average, published daily by the U. S. Department of Agricultural Marketing Service, of the price quotations for middling 15/16-inch cotton on 10 designated spot markets.

(II) Sale or contract of sale. By the cotton spot price of the business day immediately preceding the day on which the sale or contract of sale is made, regardless of the maximum price applicable to the offer pursuant to which such sale or contract is made.

(III) Delivery or transfer.* By the cotton spot price of the business day immediately preceding that on which the sale or contract of sale is made, regardless of any change in the cotton spot price subsequent thereto, except that, when the sale or contract of sale was made on or before July 20, 1941, the applicable maximum price shall

be determined on the basis of a cotton spot price of 15.99 cents per pound.

*This method of determining the maximum price shall be used in connection with deliveries and transfers pursuant to sales or contracts of sale made before, as well as on or after, the applicable ceiling date.

(2) Table of Base Maximum Prices.

The following are base maximum prices for all carded yarns. They are subject to the premiums and discounts set forth in (3) below. For a yarn intermediate between any two appearing in this table, the maximum price shall be that price obtained from this table by interpolation in accordance with the respective yarn numbers.

COTTON SPOT PRICES (CENTS PER POUND)													
Yarn No.	14.21	14.66	15.10	15.55	15.99	16.44	16.88	17.33	17.77	18.22	18.66	19.11	19.55
SINGLE:	to	to	to	to	to	to	to	to	to	to	to	to	to
	16.65	15.09	15.54	15.98	16.43	16.87	17.32	17.76	18.21	18.65	19.10	19.54	19.99
8s and under	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39
10s	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5
12s	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40
14s	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5
16s	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41
18s	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5
20s	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42
24s	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43
26s	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44
30s	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46
36s	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49
38s	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50
40s	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51
50s	53	53.5	54	54.5	55	55.5	56	56.5	57	57.5	58	58.5	59
PLIED:													
8s and under	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43
10s	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5
12s	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44
14s	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5
16s	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45
18s	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5
20s	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46
24s	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47
26s	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48
30s	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50
36s	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54
38s	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55
40s	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5	56
50s	58	58.5	59	59.5	60	60.5	61	61.5	62	62.5	63	63.5	64

*This method of determining the maximum

(3) Premiums and Discounts.

Where applicable, the premiums set forth below may be charged in addition to the base maximum prices set forth in (2) above.

No premiums other than those permitted herein may be charged for any carded yarn.

(I) Export Packing.

For yarns in waterproof packaging to be exported by sea, a premium on 1 cent per pound may be charged.

(II) Export Sales.

A premium of 5 per cent may be charged by the producer for carded yarns sold for export.*

*See Section 1307.58 for definition of "for export."

Persons other than the producer, and independent* of him, may charge for yarns sold for export a premium which can be justified as commensurate with the difference in cost between the given export sale and a comparable domestic sale.

*See footnote above, for definition of independent.

(III) Jobbers.

A jobber* who is independent† of the purchaser may:

*As used herein, "jobber" means a person at least 75 per cent of whose sales of carded yarns during the calendar month preceding any given transaction consisted of stock yarn sales. See footnote 1, above, for definition of "stock yarn."

†See footnote 1, above.

(A) Sell broken case lots of carded yarn in quantities of 1,500 pounds or less per calendar month to a given customer at a premium of 10 per cent, and in quantities

in excess thereof (but not exceeding 15,000 pounds in any calendar month to all his customers) at a premium of 5 per cent.

(B) Sell carded yarn in lots of one to three unbroken cases at a premium of five per cent, provided, that he may not avail himself of this premium in connection with sales in any calendar month in excess of (1) 3,000 pounds to the same customer or (2) 20,000 pounds to all his customers.

(IV) Special Yarns.

A premium equal to the normal trade differential may be charged in addition to the base maximum prices set forth in (2) above for:

(A) Carded yarns of twist lower than knitting or higher than warp twist.

(B) Carded yarns put up otherwise than on regular-sized cones or tubes or in skeins.

(C) Carded yarns made to tensile specifications which cannot be met with American cotton of the applicable staple length set forth below.*

Yarn Numbers:	Staple
Up to 24s, inclusive	1-1/16
25s to 30s, "	1-3/32
31s to 44s, "	1 1/8
45s to 56s, "	1-5/32
56s to 70s, "	1-3/16
71s to 80s, "	1-7/32
81s to 90s, "	1 1/4
91s to 100s, "	1-5/16
Over 100s	1 3/8

(Continued on Page 46)

Planning for Fluorescent Lighting Maintenance

By E. W. BEGGS
Westinghouse Lamp Division
Bloomfield, N. J.

ALTHOUGH fluorescent lamps have an extremely long average life, they, nevertheless, wear out and eventually burn out or fail in service. When this time comes, the old lamp must be replaced by a new one. The fixtures should be so designed and made that lamps can be easily replaced and the location of the fixtures should be chosen to provide for ready access to them for maintenance.

It is impossible to predict when each individual lamp will burn out, but it is quite possible to predict the number of lamps that will fail in any given group of lamps used over a definite period of time, if the conditions are known and particularly if the group is quite large. Lamp life expectancy curves which are similar to actuarial data for humans are used, and with them a maintenance program can be developed that will provide the maximum satisfaction at the minimum cost.

In developing such a program the lamp life expectancy should be divided into two parts. The first part is an analysis of the group of lamps installed when the fixtures were first put into operation, and the second part is an analysis of subsequent lampings.

Since the initial lamps are all new, few, if any, fail during the first few hundred hours of service. As the group of lamp ages, however, an increasing number will burn out with the rate of mortality greatest at or near the average life point. A few will remain in service for a considerable period of time. With the average run of fluorescent lamps, however, there is a fairly wide spread in life, and about half of the first lamping will fail in a period equal to about one-third the average life of the lamps.

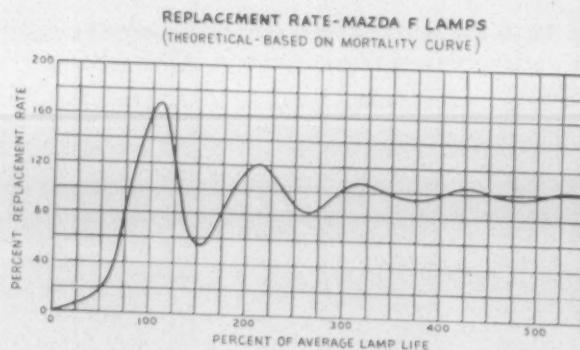
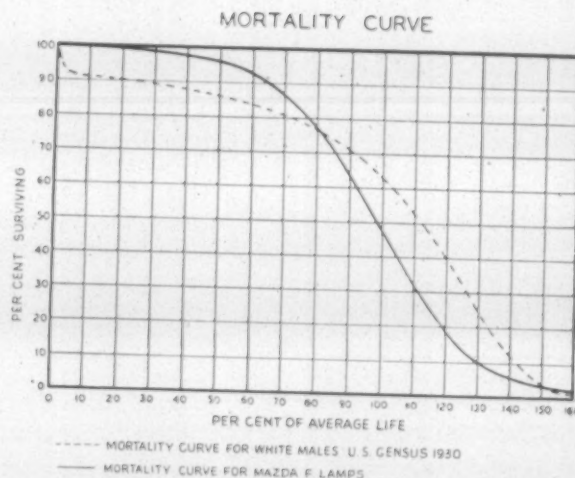
The mortality curve follows the life cycle of the first or initial lamping only. From it the following conclusion may be drawn:

1. About half of the lamps will have burned out when the average life point is reached.
2. A few lamps will burn out quite early.
3. A few lamps will live far beyond the normal life expectancy of the group. (Note: The average of the group cannot be determined until these lamps have burned out.)
4. Most of the lamps will burn out near the average life point.

5. The rate of failure varies widely, rising gradually to a peak at the average life point and then diminishing as new lamps are installed.

The approximate number of lamps per month or per year that will need to be replaced after the replacement curve levels out can be estimated from the formula below.

$$\text{No. of Failures} = \frac{\text{Hours Burned} \times \text{No. of Outlets}}{\text{Rated Lamp Life}}$$



This is the formula that should ordinarily be used although deviation from this average replacement rate must be taken into account during the first few lampings. The principal maintenance requirements for economical

*From
Earth to Air*



• Manhattan Rotary Hose, Belts and Brake Lining drilling well in Texas oil field.



• Manhattan Paronite Oil Hose loading tanker at Eastern Port.

**PRODUCTS for the
PETROLEUM INDUSTRY**

Flat Belting	Stuffing Box Rings
V-Belts	Gaskets and Packings
Rotary Hose	Rubber Covered Pistons
Pump Intake Hose	Pipe Joint Gaskets
Oil Loading Hose	Brake Lining
Refinery Hose	Molded Goods
Fueling Hose	Asbestos Products
Tank Car and Truck Hose	Abrasive Wheels
Fire Hose	Rubber Lined Tanks

MANHATTAN RUBBER speeds the products of *Petroleum*

Deep into the earth sometimes to three pressure-ridden miles—go the drills that search for the pools of "liquid gold" needed for propulsion and lubrication—twin servants of Defense.

Drilling, pumping, refining, loading—all are functions in which MANHATTAN Rubber collaborates for increased production.

At the well, the use of MANHATTAN Rubber begins—Rotary Hose, Pump Suction Hose, Flat and V-Belts, Draw-Works Brake Lining, Rubber Covered Pistons, and many other necessary items—all of Rubber, but each compounded of natural rubber or Synthetic materials to fit specific requirements.

At the refinery, MANHATTAN speeds the output with special types of rubber hose for filling barrels, tank cars, tank trucks, tankers, and bunkers—and protects with fire hose.

In the air, MANHATTAN keeps them flying seven miles up in the sub-stratosphere with engineered rubber hose that withstands the extremes of intense engine heat and bitter cold—for fuel, oil, instruments and controls—and then stops them with brake lining.

Versatile Rubber, in many forms and combinations, records the long succession of MANHATTAN developments and applications to increase the output and the effective use of essential petroleum products. Some of the more vital uses were made possible by MANHATTAN'S being the first to adapt "synthetic rubber" commercially.

THE MANHATTAN RUBBER MANUFACTURING DIVISION
of RAYBESTOS-MANHATTAN, INC.
EXECUTIVE OFFICES and FACTORIES • • • PASSAIC, NEW JERSEY

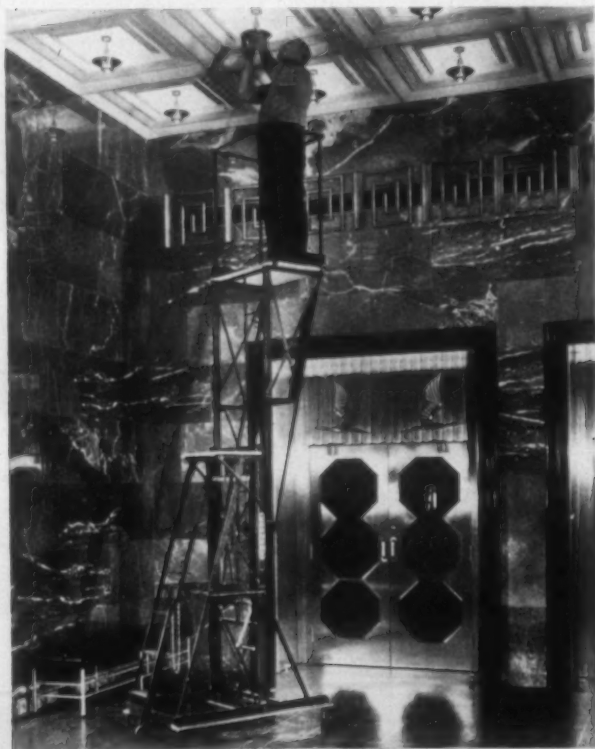


and dependable lighting are:

1. Provide means for access to the fixture for cleaning and relamping.
2. Use fixtures designed to provide for ready cleaning and relamping.
3. Provide in advance for the replacement of lamps that are to burn out. In this, it is generally best to consider first the replacement of the initial group of lamps and then to plan for the ultimate, less erratic, replacement rate of later groups of lamps.
4. Consider the relamping and maintenance requirements of the installation when choosing the size and type of lamp to use.
5. Where a fixture or group of fixtures is extremely difficult to service, use the group replacement plan.

Means of Access

The more common devices now in use to reach a lighting fixture are: ladder, movable platform, and lowering hanger. The choice is not always easy. Conditions will largely determine the best solution, but in theory a decision can be reached on the basis of cost computations. This is done by first establishing the labor cost of a single relamping with each device and then, based on the number of lamp renewals needed per year, determining the overhead cost of the equipment per renewal. The most



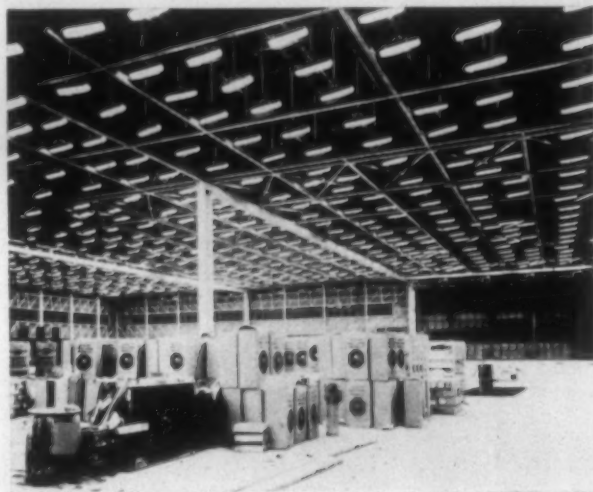
Telescoping platform brings maintenance man to the fixture. This simple type of lift, ranging up to 15 feet to the platform level can be used for mounting heights up to 20 feet, but, in general it is well to have a platform device with a little excess working height in case it is necessary to go above the fixture for electrical or mechanical operations.

economical is, of course, the one which shows the lowest combined cost of renewal labor plus overhead.

In general, it will be found that each device has an important place in the picture. Ordinarily, where very large numbers of units are to be serviced, the movable

platform is the cheapest. Where there are a medium number of units, a ladder is least expensive. Where there are only a few, the lowering hanger is the most economical.

However, where a movable platform cannot conveniently be moved about on the floor to bring the maintenance man to the fixture or where the design of the building makes the use of a ladder impracticable, the



Individual lowering hangers provide ready access to these fixtures in a new, large airplane factory. Each fixture may be lowered to the floor by servicing.

lowering hanger is not only the best but is often the only solution.

Fluorescent lighting equipment can occasionally be serviced from a catwalk designed especially for the purpose or, if the layout is carefully planned beforehand, they may be serviced from a truss or modified truss paralleling the fixture. Such a system would be unusual but, where possible, should be provided. Servicing of fluorescent lighting fixtures from a traveling crane requires a suitable safe operating platform which should be provided when the crane is installed.

A Typical Large Installation

Consider a defense plant with 10,000, 40-watt lamps burning 20 hours a day and 25 days a month throughout the year. The relamping problems here are startling.

Substituting in the formula and computing the average number of replacements ultimately to be required, that is, 10,000 times 500 times 12 divided by 2500 equals 24,000 lamps to be replaced per year, or 2,000 lamps per month after the first few relampings. That would be a sizable maintenance job, but the ultimate average replacement rate of 2,000 per month is only about half of the peak replacement rate that occurs at approximately 2,500 hours and again at approximately 5,000 hours.

The replacement curve reaches a peak of almost twice the average replacement rate after the lamps have burned about 2,500 hours. This means that whereas 2,000 per month or about 80 lamps per day would be relamped after the replacement curve levels out, over 130 lamps per day would need to be replaced during the first peak period

(Continued on Page 51)



★ IN PEACE OR WAR
WE CAN HELP YOU



THE same facilities which made these civilian fabrics possible can help your defense production. Our unequalled yarn dyeing capacity, our large stock of natural yarn and adequate winding and twisting equipment assure prompt deliveries of standard or special constructions on any put-up.

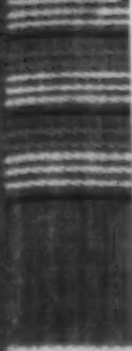
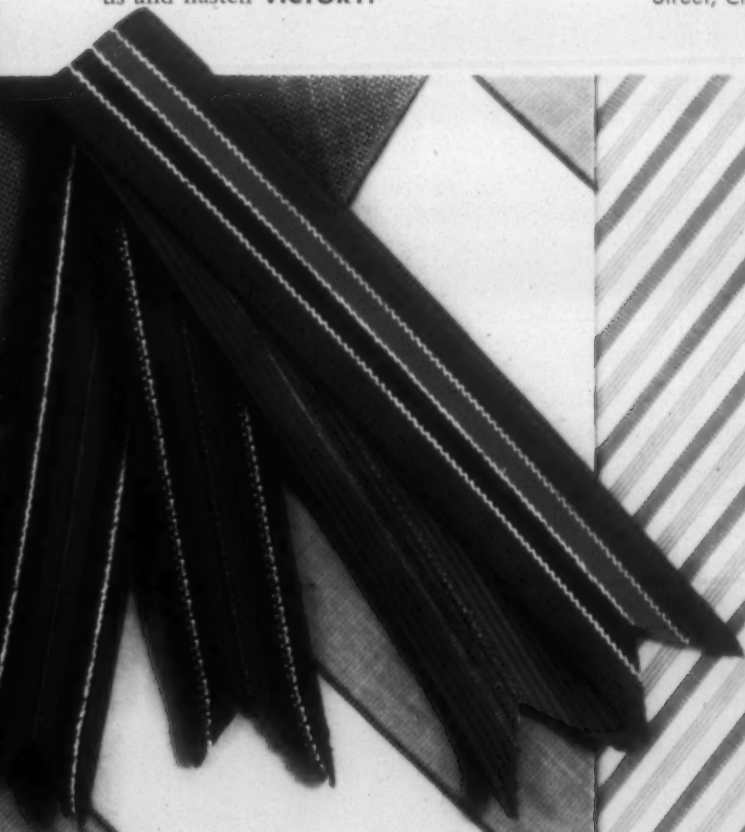
Our method eliminates waiting for yarns to be spun from dyed stock and permits quicker shade corrections and more accurate matching.

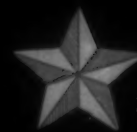
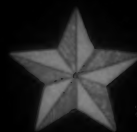
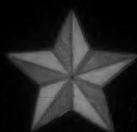
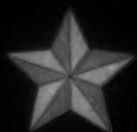
Bring your defense dyeing problems to us and hasten **VICTORY.**

Franklin Process

LARGEST PACKAGE DYERS IN THE WORLD

★ Providence, Philadelphia, Greenville, Chattanooga; New York Rep., 40 Worth Street; Chicago Rep., 100 W. Monroe Street.





Army, Navy and Marine Corps

WOOLEN AND WORSTED FABRICS



dyestuffs for the coloring of woolens and worsteds for
Government work insure:

FASTNESS TO LIGHT

FASTNESS TO WEAR

LEVEL DYEING

UNIFORMITY OF PIECE TO PIECE



Dyestuffs for OD and Navy fabrics are the result of long
experience and progressive research. Our technical specialists in
Government work are available for consultation at any time.

GENERAL DYESTUFF CORPORATION

435 HUDSON STREET • NEW YORK CITY

BOSTON • CHARLOTTE • CHICAGO • PHILADELPHIA • PROVIDENCE • SAN FRANCISCO

Southern Textile Mills and Their Equipment

The following compilation of information concerning Southern textile mills was made from the 1941-1942 Office Edition of Clark's Directory of Southern Textile Mills.

	Spin and Weave	Spin Only	Weave Only	Spin and Knit	Knit Only	Dye and Finish Only	Total Mills	Cotton Spindles	Throwing Spindles	Wool Spindles	Looms	Circular and Flat Knitting Machines	F. F. Knitting Machines
Alabama	49	20	5	2	22	1	99	1,808,372			35,879	2,182	206
Arkansas	4	1	0	0	2	0	7	41,492			716	62	20
Georgia	86	32	8	8	45	5	184	3,230,482	16,000	18,408	55,662	9,270	445
Louisiana	1	0	0	0	3	0	4	54,444			2,245	898	45
Mississippi	6	1	0	1	9	0	17	136,904			3,720	855	327
North Carolina	123	189	36	13	233	38	632	5,904,245	491,046	40,894	88,818	32,413	3,084
Oklahoma	1	0	0	0	0	0	1	43,000			1,045		
South Carolina	122	18	15	0	11	8	174	5,583,661	86,194	2,160	144,491	1,032	91
Tennessee	16	16	4	7	75	4	122	625,350	55,000	14,980	9,535	14,947	1,206
Texas	23	2	0	0	4	0	29	239,024		324	5,635	21	103
Virginia	26	11	18	0	42	6	103	681,745	120,878	18,592	23,703	4,480	531
Totals	457	290	86**	31*	446	62	1,372	18,348,719	769,118	95,358	371,449	66,160	6,058

*5 spin, weave and knit. **1 weaves and knits.

Rayon Department Is First In Du Pont's Sales

The rayon department of E. I. du Pont de Nemours & Co., Inc., continued in 1941 to be first on the list of the various industries products from the standpoint of sales and other operating revenues, it is pointed out in the annual report of that company. Included in this category are viscose and acetate rayon, acetate flake, nylon and nylon yarn, but not the operations of the cellophane division.

Speaking of the non-military expenditures in 1941, which totaled \$50,600,000 for plant construction, it is pointed out that "the expenditures for additional capacities in 1941 were principally for the manufacture of nylon yarn, nylon intermediates, ammonia, neoprene, synthetic rubber, cellophane, cellulose, film, viscose rayon yarn ("Cordura") for automotive tires, sodium and solvents (for metal cleaning, dry cleaning and extraction)."

The portion of the report dealing specifically with nylon states: "The company's productive capacity of nylon yarn is being increased as rapidly as conditions will permit. Production in 1941 was approximately 170 per cent greater than in 1940.

"Hosiery manufacturers used nylon yarn in more than 109 million pairs of women's stockings in 1941, compared with about 35 million pairs in 1940. The yarn also is being used, in limited quantities, in the manufacture of many other kinds of wearing apparel. In the form of a monofilament, nylon is being used in increasing quantities for racket strings, surgical sutures, and as bristles for many types of brushes. Nylon also is used as an insulation in coverings for electrical wires.

"There is a rapidly increasing demand for nylon yarn for use in the production of certain kinds of military equipment, heretofore almost entirely dependent upon

silk or linen, and an important part of the company's nylon yarn producing capacity in 1942 may be so required."

It will be recalled that recently the company's net income for the year was given as \$90,401,470, as compared with \$86,945,173 for the preceding year. Sales during 1941 reached \$480,109,939, as against \$346,162,000 in 1940.

South Carolina Textile Progress

(Greenville Daily News)

Despite a gratifying trend toward greater diversification of industry in this State, the textile industry continues to be far and away South Carolina's most important industrial asset.

Recent statistics from the Census Bureau show that in December, 1941, South Carolina mills operated more spindle hours than did mills of any other State—and that is a record of supremacy that has been maintained for more than seven years.

Textile payrolls in South Carolina in 1941, according to the State Labor Department, totaled more than \$87,000,000, which was an increase of \$13,000,000 over the preceding year. Out of every \$100 paid out in industrial wages in this State, the textile paid \$74. Last year an average of 102,000 people were employed in the mills, and both the wage figures and the employment figures were the highest on record.

The textile industry, of course, is making a tremendous and vital contribution to the nation's war effort; and South Carolinians can take pride in the proportionately heavy participation in that program by the mills of this State.

Reminiscences of

YE OLDE COTTON FACTORY

By
I. K. EDWARDS
Part One

IT IS highly probable that very few people now engaged in the great textile industry in the Southern States ever spend very much time in reviewing the experiences of those hardy pioneers who worked and strove and fought against obstacles so energetically and untiringly and uncomplainingly to bring into existence the magnificent exhibition of accomplishments which we observe wherever we are pleased to travel.

It might, therefore, be of passing interest to a portion of the present-day personnel, and even others not in the textile business, to relate a few of our old customs.

Fifty-odd years ago the "cotton factory" was usually a one or two-story frame or brick building with an average of about 5,000 spindles, water or steam for power, kerosene lamps for light, coal and wood stoves for heat.

Cotton was bought where it could be found, and not always graded as carefully as a good quality of yarn required, but that phase of the industry has seen a very rapid and marked improvement.

Bales were opened and mixed into large bins and allowed to remain for a day or two before being used.

The number of bins was, of course, determined by the requirements of the mills. The average equipment of a mill was about 5,000 spinning spindles which has been the basis upon which to calculate the capacity of new mills.

When cotton was ready to be fed into the "opener" it was taken from the bin by hand, one man operating one to three or four machines. These openers were equipped with a long lattice apron upon which the cotton was spread evenly and of the proper thickness to insure the building of a smooth, even "lap" which was formed by the machine receiving the stock (cotton) from the apron and running through a set of "beaters" and heavy steel rolls, pressing into a "breaker lap" to be used on the next process, namely, the intermediate picker or lapper. The opening machine of that period was very different from that of today.

The product of the opener (also called the "breaker picker" or breaker lapper) was a mass of cotton having been run through the machine and pressed between heavy steel rolls and made into a sheet about 40 inches wide $\frac{1}{2}$ to 1 inch in thickness, was placed, after being rolled into a lap, on an apron back of an intermediate picker or lapper.

These rolls or laps were about 16 inches in diameter by 40 inches in length, four in a group on each apron, thus

repeating the process through the intermediate picker. The product of the intermediate was repeated in the successive process known as the finisher picker, or lapper. Each of these three operations upon the cotton (commonly called raw stock) were required to put the stock in a proper condition to be carded.

As the laps were taken from the finisher lapper they were required to weigh 30 to 40 pounds, which was accomplished by an evener device attached to each lapper, which operated in conjunction with a measuring device to control the length of the "lap" as well as the weight, by a knock-off which stopped the rolls and cut the lap at the required length. Then the full lap was taken off the machine and a new one started.

The duties of the operatives in the opening and lapper rooms were, in most cases, such as to require able-bodied men as very few, if any, automatic means existed so that a very creditable degree of efficiency in this department eventually developed.

After a brief survey of the conditions and habits and purposes of the opening and lapper room, which is the foundation of the card room, we come to the card itself. This machine was of the wood top flat type, consisting of a hardwood flat about 2 inches thick by $2\frac{1}{2}$ inches wide by 40 to 42 or more inches in length or long enough to cover the cylinder, a strip of card clothing tacked on the bottom edge to work with the cylinder. Taking the lap from the finisher lapper and placing on back of card and starting the process of carding was the beginning of the card tender's duties, which consisted of all the necessary attention to the cards except the grinding and fixing which was the responsibility of the card grinder in charge of the cards and card tenders, and in some cases he would supervise the drawing and drawing tenders. Striping was done by lifting 4 to 6 top flats from position on top of the cylinder thus exposing sufficient space to strip cylinder.

A hand card about 4 inches wide by 14 to 16 inches long with a 4 or 5-inch handle was used by the card tender standing on a box to push cylinder backward while bringing the hand card with a downward and forward stroke, thus the entire cylinder was finally stripped.

Cards were placed in groups or lines usually 8 or 16 in a line and in most cases the fronts of each two lines faced each other thereby enabling card tenders to perform their tasks with less loss of time. After stock passed through cards and was delivered at the front in the form of "sliver" (a small roll of carded stock about $\frac{3}{4}$ to $1\frac{3}{4}$ inches in diameter) it was received into a box running

(Continued on Page 46)

Cutler S A K T A P E

The Original Power Saving Spinning Tape

At the present time, textile mills all over the country are being asked to maintain maximum production schedules with a minimum of power consumption, and this places further emphasis on the selection of the finest spinning tape obtainable.

Inferior light-weight spinning tapes are on the market. These were produced after and in imitation of CUTLER SAK TAPE, which was invented, developed and produced by Roger W. Cutler. You can save time and money by standardizing on the original.

Commercial operation with CUTLER SAK TAPE shows decreased power consumption and increased production, which every mill is striving for today.

*"Millions for defense—but not one cent
for inferior spinning tapes."*

ROGER W. CUTLER

BOSTON, MASS.

GREENVILLE, S. C.

Southern Agent:

M. BRADFORD HODGES, Atlanta, Ga.

Some Observations and Pointers on Care of Leather Rolls in Textile Mills

By T. R. Brockleman

WITH some mills running 168 hours a week and a great many running 144 hours, there has been a tremendous increase in the demand for supplies of all kinds. There is little time for cleaning machinery properly, there is little time to study the principles of efficient production—details that formerly could be looked after in good time are of necessity relegated to the category of emergency today. Every part of a textile mill is being called upon to produce more than it ever has been called upon to do before.

Mills are likely to have trouble getting supplies of all kinds; many supplies formerly easy to obtain are now practically impossible to get, and from all reports the situation is likely to get much worse rather than better.

The other day I had a talk with a salesman for a leather concern which concentrates quite a bit of its production on textile supplies. Since we are constantly hearing reports of shortages in this and that material, priorities, allocations, etc., I was curious about the leather situation, particularly as concerns spinning and roving rolls, and asked this salesman about the possibility of a shortage in these items. My private opinion was that there should be plenty of this material, since the armed forces use comparatively little of it. With the "good neighbor" policy in effect with the South American nations, Argentina being a large producer of cattle, it seemed to me that leather would be one of the things that would be easy to get enough of.

This salesman told me that he thought that the mills would be able to get all the leather articles that they needed, including rollers. However, he said that there would be some shortage of leather for certain uses, not because of any shortage of hides, but because of a shortage of the necessary chemicals for properly curing and treating the hides to make them into acceptable leather for the many uses to which they are put.

The first use of all leather, according to him, will be for the armed forces. The second will be for industrial plants, most of which are producing for the armed forces, and certainly the textile industry will be included in this. This indicates that there will not, for the present, be any serious shortage of leathers for roll covering. For the good of the nation, though, it will be well for the textile industry to conserve their leather goods, along with other things.

Probably the most effective means of conserving leather rollers in textile mills is in seeing to it that the travers-

ing mechanism is in good order. Nothing that I know of will render a leather roller useless more quickly than a traverse motion not operating or one that has too short a stroke. Too, this is something that can be quickly checked on and easily remedied, thus making it an almost inexcusable fault that is often found.

There is no excuse for a faulty traverse mechanism other than carelessness—unless it is that the effects are slow to show themselves. If the traverse stops, the frame continues to run satisfactorily until the roving has had time to dig into the roller sufficiently to work a trench into the leather at the point of contact so that it will no longer draft properly. The roller is then a complete loss, and must be re-covered before it can produce good yarn. The roller is no more good, but only a minor portion of the leather has had appreciable wear, thus the expected life of the roller is cut by about 50 per cent or more.

Checking the roving traverse on a frame might be compared with checking the oil on an automobile, though the outlay for failure to do so might not be so drastic. A section man will not run his automobile without checking the oil until a knock develops, yet he may let his frames run until the roving has channelled the rollers without checking the traverse. In this particular, the old adage that "a stitch in time saves nine" certainly works. A casual check on the traverse every day or two will save a large number of rollers in any mill.

The second greatest cause of poor performance of leather rolls, in my opinion, is careless handling on the part of those who have to handle such rolls. Leather is a porous material, and will take up moisture if exposed to an excess. Therefore it should always be stored in a dry place. Furthermore, in the case of leather rollers, they should always be stored either on end or in boxes where the end bearings are supported in such a way that the leather portion of the rolls do not touch any object. Continuous pressure at one point on a roller will cause it to flatten at that point, and will make for unsatisfactory performance. Today, mills do not stop for any considerable period, but in the past when mills might have been stopped for more than a day, the rolls should have been relieved of their weighting devices for the period.

Hard ends in the roving are death on leather rolls, as well as on any other type of covering. They should be checked and reduced to a minimum. As with many other things in the textile mill, as well as other industries, trou-

(Continued on Page 41)

IT IS NOT NECESSARY
To Spin
 ONE FOOT OF DEFECTIVE
Yarn
 BEFORE IT IS
 AUTOMATICALLY
Caught
and
Stopped

This refers to the defect being caused by the roller covering.

GILLEATHER

cannot spin defective yarn, because when the cover becomes worn, the roughened fibers break the yarn and therefore no defective yarn is spun.

Leather is the only material that has this valuable characteristic.

But in Addition to this Advantage GILLEATHER gives you much longer useful spinning life than any other leather and has the lowest spindle hour cost of any dependable covering.

Would you care to prove this statement in a few seconds on your own desk? Then write and ask for the evidence and proof.

GILL LEATHER COMPANY

SALEM, MASS.

Utica, N. Y.

Campbell & Jefferson Co.

Gastonia, N. C.
 Greenville, S. C.

W. G. Hamner
 W. J. Moore

Greenville, S. C.
 Griffin, Ga.

Ralph Gossett
 B. C. Plowden

Used, Damaged, or Re-Sewn Burlap Under Ceiling Regulations

Reports of sales of used, damaged or re-sewn burlap at prices higher than the ceilings applicable to new burlap have resulted in the issuance of clarifying amendments to Price Schedules Nos. 18 and 55 by Leon Henderson, Administrator of the Office of Price Administration, to prevent further misinterpretations or evasions. The amendments became effective February 7th.

The burlap price schedule (No. 18) as originally issued was intended to cover not only new material, but used, damaged and re-sewn burlap as well. Since its issuance, OPA has discovered that some sellers, taking advantage of the acute demand for burlap, have been disposing of second-hand and damaged materials at prices higher than those obtaining for new burlap under price ceiling. The amendment makes clear that the schedule applies to all burlap.

In cases where re-sewn burlap is made up of more than one construction, the maximum price applicable is that at which the lowest priced component is ceilinged.

The amendment to Price Schedule No. 55, which sets ceiling prices on second-hand basis, is merely to end confusion that has arisen concerning the pricing of bags manufactured of second-hand materials. Under the original schedule, a second-hand bag was defined as one that had been used one or more times, emptied and then resold for further use as a container. Sometimes, however, second-hand bags are ripped apart and the material re-worked into smaller containers. Containers are also manufactured from re-sewn burlap. It was the status, under the price schedule, of these re-sewn and re-worked bags that had been in doubt. The amendment makes it clear that any container manufactured from second-hand material is covered by the schedule.

Woolen Imports From Great Britain

Despite the fact that U. S. imports of British woolens have never amounted to more than two or three per cent of American mill production, they are of vital importance to Britain in building credit for the purchase of U. S. products not obtainable under lend-lease provisions, it was declared recently by Sir Kenneth Lee, representative in the United States of the Industrial and Export Council of the British Board of Trade.

Sir Kenneth was the principal speaker at the annual luncheon of the Merchant Tailors and Designers' Association of America, held in the Roosevelt Hotel.

"The British manufacturers are making every attempt consistent with the war effort," Sir Kenneth pointed out, "to maintain exports of fine woolens and woolen fabrics at recent levels, even to the extent of great personal privation."

He explained that increasing war production in Britain, and growing difficulty of obtaining raw materials from abroad, had finally forced rationing of clothes.

"Since the beginning of the war," Sir Kenneth said, "various kinds of food have been rationed, but it was only during the middle of last year that the Government issued an order instituting the rationing of clothing. This order puts rationing at the proper point, that is, at the point of consumption. Every person has an annual allowance of 66 coupons.

"To give you an idea of what 66 coupons will buy in the way of a man's outfit—if the man buys a raincoat, a suit (including coat, vest and trousers), a pair of pajamas, a pair of shoes, a pair of socks, a shirt and two handkerchiefs he has used his total yearly allowance. You will see that he has used up his allowance without having been able to buy a tie, or an undervest, or shorts—and, of course, he couldn't get things like bathing trunks. The people of England are having to be very careful of their clothes, but they gladly wear patches to help achieve victory."

Curtailed exports has also been necessary, Sir Kenneth said, pointing to a new ruling effective the first of this month which places restrictions on the British exporter of fine woolens and woolen fabrics. The total goods now allowed for export depends on the volume exported for the year ending October 31, 1941. On this basis, the exporter knows how much he can export during February, March, April and May of this year.

The allocation for this four-month period, he explained, actually will be high in comparison to allocations that will probably be made for the two four-month periods immediately following, each of which is expected to amount to approximately half of the current period. The actual intent of this ruling, he said, is to maintain exports of British fabrics into this country as closely as possible to recent levels, which are very small when compared to domestic production.

"Even in the prosperous days of 1929," Sir Kenneth pointed out, "U. S. imports of British fabrics did not exceed three and one-half per cent of the amount produced by American mills, and during the last two years they have hovered around two per cent."

Commenting on recent restrictions of the U. S. Government on the use of new wool for civilian purposes, he declared that the American merchant tailors faced "a large share of the responsibility" for maintaining during the war a general appreciation of quality in the public mind.

"The U. S. Government restrictions limit only the amount of new wool," he explained. "Naturally the American manufacturer in the volume field must attempt to meet the civilian demands by producing the required number of units even though this may require the use of other materials.

"But in war-time we must be ready to make changes, ingenious enough to adapt ourselves to war conditions, and if necessary to accept other standards of quality than those to which we are accustomed. I hope, however, that the acceptance of other standards will not mean that when the war is over quality will have been forgotten. I believe the merchant tailors, whose standards of quality are traditionally high, will agree that the love for fine British woolens is so deeply ingrained that even a total world war cannot kill it."

Cotton Processing Chemicals Lost on S. S. City of Atlanta

A carload of cotton softener, shipped by the Hart Products Corp., and consigned to a Southern mill, was lost when the S. S. City of Atlanta, bound for Savannah, was sunk by enemy action January 19, 1942.



SHORT-SIGHTED OR FAR-SIGHTED?

It's strange how different a situation can look from two points of view. For instance, if you took a short-sighted view of present conditions, and saw how unable we are to satisfy the market's requirements for rayon, you might conclude that we should devote ourselves 100 per cent to production, and discontinue all other activities. You might say that these other activities, which include fiber research, fabric development, mill technique and sales assistance, were non-essential, that money spent on them

was money wasted. You might think so—today.

But look again at the same situation, and this time be far-sighted. You'll see how essential these research and development activities really are. You'll see that the ideas developed by these practical scientists are destined to aid America's textile industry immeasurably, when conditions return to normal and problems other than supply arise to plague us.

Our research program goes right on, as though nothing unusual were happening outside the laboratories. And when you need help of a technical nature, either in connection with production methods or fabric development, you will find us ready with a vast assortment of new ideas, developed to the stage of practical usefulness.



AMERICAN VISCOSE CORPORATION

World's Largest Producer of Rayon Yarn

SALES OFFICES: New York, N. Y.; Charlotte, N. C.; Providence, R. I.; Philadelphia, Pa.
PLANTS AT: Marcus Hook, Pa.; Parkersburg, W. Va.; Roanoke, Va.; Lewistown, Pa.; Nitro, W. Va.; Meadville, Pa.; Front Royal, Va.



Emmons reeds — promising fewer loom stops, due to *extra air space, accurate dent spacing and extra polishing* — are manufactured at Charlotte.

Other Emmons products — including standard sizes of flat heddles, heddle bar stock, and heddle frame repair parts are kept in stock.

As near as the nearest telephone, you will find Emmons representatives who are practical mill men. Have them help you get the most from your harness.



SEE LATEST TEXTILE WORLD YEARBOOK FOR DETAILS ON ALL EMMONS PRODUCTS

Concerning Bed Sheet Ceilings

The types of bedsheets used in determining the maximum prices established by the Office of Price Administration in its so-called "bed linen schedule" issued recently are obviously based on the recommendations to the American Standards Association of a bedsheet committee composed of wide sheeting producers and their distributors, according to the Cotton-Textile Institute.

Institute officials stated that the work of establishing standards for bed sheets was started last spring by a committee headed by Magruder Dent, of Joshua L. Baily Co., which included A. H. Crossman, Utica & Mohawk Cotton Mills; S. Phillips, Cannon Mills; Dennis L. Reardon, Riverside & Dan River Mills; Paul Welles, Pequot Mills; Donald B. Tansill, Pepperell Mfg. Co.; Paul B. Halstead, Cotton-Textile Institute. G. K. Lake, of Pepperell, was technical advisor.

Of the seven standards drawn up and recommended by the committee, four are being used as "keys" in the new prices schedule which means that they have been accepted by the Government for pricing purposes at least.

The standards recommended by the committee follow:

BLEACHED COTTON PERCALE BEDSHEETS

	Type 180	Type 180	Type 200
	Carded	Combed	Combed
Thread count per sq. in.	180	180	200
Weight per sq. yd.—ounces	3.6	3.6	2.85
Tensile strength—warp—lbs.	60	60	70
filling—lbs.	60	60	70
Tape selvages— $\frac{1}{4}$ "	yes	yes	yes
123yes. Plain hems, total for ends	4"	4"	4"
Stitches per inch	14	14	16
Added sizing (maximum)	4%	4%	2%

BLEACHED COTTON BEDSHEETS

Minimum Specifications	Type 140	Type 128	Type 112
Thread count per sq. in.	140	128	112
Tensile strength—warp—lbs.	70	55	45
Weight per sq. yd.—ounces	4.6	4.0	3.7
filling—lbs.	70	55	45
Tape selvages— $\frac{1}{4}$ "	yes	yes	yes
Plain hems, total for both ends)*	4"	4"	4"
Stitches per inch	14	14	14
Added sizing (maximum)	4%	6%	10%
Hems:			

*As crib and hospital draw sheets have narrower hems, the 4-inch total for both ends will not apply to these types.

The types used in determining price maximums in the OPA schedule are 180, 140, 128 and 112.

"Rayflex" Output Goes On War Uses, Viscose States

The entire output of "Rayflex," a high-tenacity rayon yarn made by the American Viscose Corp., is now being used for making self-sealing gasoline tanks for military airplanes and tire cords for heavy duty tires, the bulk of which are for Army trucks, reconnaissance cars, and other motorized military equipment, the company announced.

"THEY ARE ALL FUGITIVE"

TINTINOL

Certified Fugitive Tints for

SYNTHETIC CUT STAPLE

WOOL • COTTON • SILK

BORNE SCRYMSER COMPANY

ESTABLISHED 1874

SOUTHERN SALES MANAGER • H. L. SIEVER, CHARLOTTE, N. C.

Representatives

R. C. YOUNG, CHARLOTTE, N. C. • W. B. UHLER, SPARTANBURG, S. C.
JOHN FERGUSON, LA GRANGE, GA.

New England Representatives

A. M. KNIGHT, WEST YARMOUTH, MASS.
F. L. EKSTRAND, STAFFORD SPRINGS, CONN.

ELIZABETH • N. J.

CHARLOTTE • N. C.

HOW TO GET **LONGER LIFE** *and*
BETTER WORK FROM CARD CLOTHING



**DON'T
USE A STRIPPING
BRUSH LIKE THIS !**

It is a fallacy to assume that the vacuum stripper has made the stripping brush on a card unnecessary. The latter still plays an important part in the promotion of good carding by freeing the cylinder clothing of impacted waste, hulls and other foreign matter which the former fails to touch, and good carding practice demands that a brush be used regularly once a week.

The cost of a stripping brush is negligible. Therefore there is little excuse for using one in poor condition. This is all too frequently done and is often the cause of selvages loaded with neps. Shiners (wire knocked forward) and loose fillets are the results from using a brush in the above condition.

It pays to use a good stripping brush and one with the correct wire for the purpose. Ashworth can supply you with both.

ASHWORTH

PIONEERS IN CARD CLOTHING

ASHWORTH BROS., INC.

Woolen Div.

AMERICAN CARD CLOTHING CO.

3 FACTORIES FALL RIVER, WORCESTER, PHILADELPHIA
6 REPAIR SHOPS FALL RIVER, PHILADELPHIA, CHARLOTTE, GREENVILLE, ATLANTA, DALLAS

7 DISTRIBUTING POINTS FALL RIVER, WORCESTER, PHILADELPHIA, CHARLOTTE, GREENVILLE, ATLANTA, DALLAS

**SOUTHWESTERN REPRESENTATIVE:
TEXTILE SUPPLY CO., DALLAS, TEXAS**

PRODUCTS AND SERVICES: Card Clothing for Cotton, Wool, Worsted, Silk and Asbestos Cards and for all Types of Napping Machinery • Brusher Clothing and Card Clothing for Special Purposes • Lickerin Wire and Garnet Wire • Sole Distributors for Platt's Metallic Wire • Lickerins and Top Flats Reclothed

Mill News

BISCOE, N. C.—The Aileen Mills Co. has just installed three Cidega knitting looms in its plant here.

BREVARD, N. C.—The Pisgah Mills have recently completed the repainting and repairing of all village houses inside and out. The office building was also remodeled and repainted. A new addition for a warehouse has been completed and an addition to the storage room is nearing completion.

CHARLOTTE, N. C.—Choate Mills, Inc., has been given a charter to manufacture all types of yarns, yarn products and all kinds of by-products. Authorized capital stock 250 shares par value \$100, subscribed stock \$500, by Joe L. Blythe, R. J. Boyd, Jr., and J. B. Choate, all of Charlotte.

ADAIRSVILLE, GA.—Fire destroyed the Burns Bedspread Co. here recently. A large stock of materials and spreads and a number of chenille machines were burned. The loss was partially covered by insurance, it was reported.

BREVARD, N. C.—At a meeting recently of the board of directors of the Pisgah Mills, C. W. Lively, of Greenville, S. C., was elected secretary and W. M. Melton was re-elected vice-president and general manager. G. F. Williams is the president.

BURLINGTON, N. C.—Copland Fabrics, Inc., which was organized last year, is reported to be now producing about 100,000 yards of rayon marquisette per week. The plant occupies the site of the old Hopedale Mill, a short distance out of Burlington. The New York sales office is J. W. Valentine Co., Inc., at 40 Worth street.

Officers of the company are J. R. Copland, Sr., president and treasurer; J. E. Baker, vice-president, and Geo. H. Fowler, secretary and assistant treasurer.

SPARTANBURG, S. C.—Whitney Mills, Inc., new company formed to acquire and continue operation of the Whitney Mills, employing 500, will be chartered by the State, it is learned.

Recently the mill was sold to Jacob Ziskind, Fall River, Mass., for \$450,000. Negotiations for resale by Ziskind to a new group are well under way, Victor Montgomery, Spartanburg, treasurer, said. When the resale is consummated, plans are to convert the mill into a defense plant. The sale of the plant to Ziskind, of Crescent Mfg. Co., Fall River, was to have been effective March 3rd. His plan was to dismantle the mill and convert it into a textile machine shop.

HOGANSVILLE, GA.—United States Rubber Co. has purchased the Hogansville plant of the Callaway Mills, it was announced by H. Gordon Smith, general manager of the company's textile division. Acquirement of this plant and its equipment will enable the company to make substantially all of its own duck for belting, hose and other mechanical goods.

The mills, like the company's tire cord mills to which they are adjacent, were purchased from the Callaway Mills of LaGrange, Ga. The 400 workers, according to Mr. Smith, will be continued on their jobs, and it is probable that others will be employed.

SHELBY, N. C.—A fire of undetermined origin broke out in the Buffalo Cotton Mills near here January 30th, causing a damage of approximately \$10,000.

R. J. Woods, owner of the mill, said he did not know just how the blaze started except that it originated in the wheel house and later spread to the upper floors of the main buildings.

Workers in the mill helped to keep the fire down with the mills' fire hose until the Shelby Fire Department arrived. Much damage was done to the machinery by water.

Mr. Woods said the mill will be forced to curtail its operation at least temporarily, putting a halt to its 85 workers and their production on defense orders.

HOGANSVILLE, GA.—United States Rubber Co. soon will build a new factory in Hogansville for the exclusive manufacture of asbestos yarns and fabrics, it was announced by H. Gordon Smith, general manager of the company's textile division.

The new building, to be erected on land owned by the company adjacent to its Stark Mills, is required to meet the rapidly growing demand for Asbeston products, Mr. Smith said. Asbeston is the trade name under which the company's asbestos textiles are sold.

Output of Asbeston was greatly increased last July when considerable new equipment was installed in the Stark Mills. The expansion plans now under way double present capacity.

Production of Asbeston is based on new processes for making asbestos textiles patented by the United States Rubber Co. Work on these processes has been pursued at Hogansville for the last six years. The substantial production now in progress represents a large scale commercial recognition of the value of many years of experimental and development work.



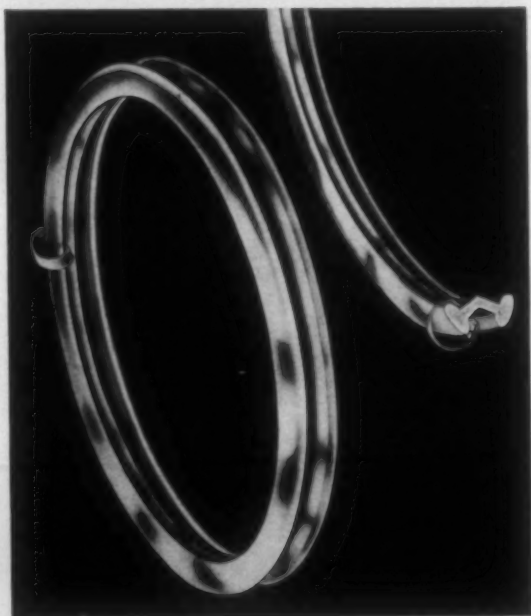
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Since 1866 our policy of Fair Service to All has been the bulwark of our business. It has withstood the test of two major wars and several depressions. Today our customers have confidence in our ability to protect their interests . . . especially through the present emergency. They have confidence in the high quality of our textile starches . . . corn, potato, wheat . . . which reflect the craftsman's art in skillfully converting the best materials the world affords. This customer confidence is one of our most valuable assets. We shall do all in our power to preserve and strengthen it.

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CHARLOTTE, N. C.



RAGAN RINGS not only increase spindle efficiency but also help to improve yarn quality. These are definite reasons why . . . ask for the whole story and samples

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No Humidifier can
possibly have Everything
Every Humidifier has
Something

Certified CLIMATE

is applied engineering;
"something" for "something";
the right "something"
for the work you need
and want done.



HIGH DUTY



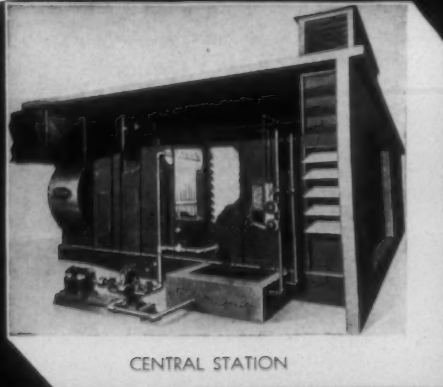
TURBOMATIC



PSYCHROSTAT



AIRCHANGER



CENTRAL STATION

Parks-Cramer Company

Fitchburg, Mass.

Charlotte, N. C.

Personal News

O. D. Boyd has been made general superintendent of Martel Mills, Asheville, N. C.

H. P. McElroy, formerly of Tifton, Ga., is now superintendent of Morgan Mills, Quitman, Ga.

J. C. Keller has resigned as superintendent of the Park Yarn Mills, Kings Mountain, N. C., because of ill health.

D. R. Dickson is now overseer of carding and spinning at Winton Mills, Fort Valley, Ga.

J. S. Gammons is now overseer of carding and spinning at Geneva Cotton Mills, Geneva, Ala.

F. E. Vantine has resigned as treasurer of the Republic Cotton Mills, Great Falls, S. C.

I. L. Blalock has resigned as overseer of spinning at Erlanger Mills, Inc., Lexington, N. C.

Lawrence Webb is now overseer of carding at Tifton Mills, Tifton, Ga.

R. T. James has been promoted from overseer to superintendent of the Enterprise Mfg. Co., Enterprise, Ala.

C. H. McElroy is now overseer of carding at the Morgan Mills, Quitman, Ga.

L. E. Lane is superintendent of Piedmont Mills, Egan, Ga., and not Egan Mills, as listed in previous Directory.

J. C. Upchurch, formerly of Charlotte, N. C., is now manager of Winton Mills, Fort Valley, Ga.

Hugh Ballard has been named superintendent of the Park Yarn Mills Co., Kings Mountain, N. C., succeeding J. C. Keller, resigned.

W. J. Nipper, formerly of Mercury Mill, Charlotte, N. C., is now overseer of carding at Martel Mills, Asheville, N. C.

J. D. Moon, formerly of Avondale Mills, Birmingham, Ala., is now overseer of weaving at Geneva Cotton Mills, Geneva, Ala.

J. R. Daniel, formerly with Jefferson Mills, Royston, Ga., is now overseer of twisting at Tifton (Ga.) Cotton Mills.

C. W. Coleman, director of welfare education at Callaway Mills, LaGrange, Ga., was a recent speaker at a meeting of the Marietta, Ga., Rotary Club.

E. A. Kiser, formerly with Mercury Mill, Charlotte, N. C., is now superintendent of Martel Mills, Asheville, N. C.

J. D. Stanley, formerly of Winfield, Ala., is now overseer of carding at the Birmingham Textile Co., Birmingham, Ala.

R. H. Higgins, formerly overseer of spinning at Harriett Cotton Mills, Henderson, N. C., is now with Martel Mills, Asheville, N. C., in a similar capacity.

V. D. Snyder, formerly with Mathews Cotton Mill, Greenwood, S. C., is now general overseer of weaving at Erlanger Mills, Inc., Lexington, N. C.

Landon C. Bransher, assistant treasurer of the Roxboro (N. C.) Cotton Mills, has accepted the chairmanship of the Person County Committee for Civilian Defense.

G. W. Fortune, formerly with Cleveland Cloth Mills, Shelby, N. C., has been transferred to the purchasing department of Carter Fabrics Corp., Greensboro, N. C.

J. A. Pinson, in the purchasing department of Carter Fabrics Corp., Greensboro, N. C., has been called into active duty in the army.

J. L. Riegel, of White Plains, N. Y., has been named president of the Ware Shoals (S. C.) Mfg. Co., succeeding the late Benjamin D. Riegel.

J. B. Oliver, formerly superintendent of Piedmont Mills, Egan, Ga., has been confined to the hospital with a serious throat infection.

Horace Buchanan, formerly of Drayton Mills, Spartanburg, S. C., is now assistant designer and planning man for Erlanger Mills, Inc., Lexington, N. C.

Samuel L. Diggle, Jr., formerly in the textile business in Charlotte, N. C., has been promoted from ensign in the Naval Reserve to Lieutenant, J. G.

R. W. Arrington, president of Union Bleachery, Greenville, S. C., has been re-elected a director of Franklin National Life Insurance Co.

C. W. Wilbanks, formerly with Springs Cotton Mills, at Lancaster, S. C., is now overseer of spinning at Erlanger Mills, Inc., Lexington, N. C.

Abner D. Potter, who has been connected with the dyeing and finishing department of the F. F. Hosiery Division of the Burlington Mills Corp., Greensboro, N. C.,

CLINTON

STARCHES

*For All
Textile Purposes*

UNIFORMITY
QUALITY SERVICE

CLINTON COMPANY

CLINTON, IOWA



Dixon's Patent Reversible and Locking in Back Saddle with New Oiling Device three Saddles in one, also Dixon's Patent Round Head Stirrup.

Send for samples

DIXON LUBRICATING SADDLE CO.
Bristol, R. I.

"You Can Count on WAK Counters"
They are Rugged, Accurate, Dependable

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Prompt Shipment All Grades on Short Notice

Suitable for Blends with Rayon or Cotton

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PRECISION BOBBINS

Accuracy is the watchword in every detail of design and manufacture of Precision Bobbins. For example, at the point in the spotlight—the feeler space—minimum tolerances are essential to correct operation of feeler motion. Too much taper causes sluffing—too little taper interferes with stripping.

For uninterrupted production—
Precision Bobbins.

**NEW ENGLAND
BOBBIN & SHUTTLE CO.**

George M. Hambleton, Gen. Mgr.
NASHUA, NEW HAMPSHIRE

has been called into active service with the U. S. Army as a second lieutenant of infantry. He is a graduate of N. C. State College.

Herman Cone, president of the Proximity Mfg. Co., of Greensboro, N. C., has been elected president of the Greensboro Chamber of Commerce.

Spratt Blankenship, formerly with Stowe Spinning Co., of Belmont, N. C., is now assistant overseer of spinning at the Peerless Spinning Corp., Lowell, N. C.

T. Frank Watkins, chief counsel for the South Carolina Cotton Manufacturers' Association, has been elected president of the Anderson, S. C., Chamber of Commerce.

C. P. Dill, superintendent of the Brandon Corp., Woodruff, S. C., addressed the Rotary Club of Woodruff on February 11th. His subject was "Cotton Manufacturing."

E. J. Wentz, who has been overseer of weaving at Erlanger Mills, Lexington, N. C., has resigned to take a position with Riverside & Dan River Cotton Mills, Danville, Va.

D. W. Anderson has been named president of Monarch Mills, with plants at Union and Lockhart, S. C. Mr. Anderson has been serving the mills in the capacity of vice-president and treasurer.

D. M. Williams, formerly with the Smithfield (N. C.) Mfg. Co., is now superintendent of the Adrian and Madadora mills of the American Yarn & Processing Co., Mount Holly, N. C.

Charles A. Turner, Clemson College Textile School graduate of 1941, has been commissioned an ensign in the U. S. Naval Reserve and is on aviation patrol duty. He is a native of Rock Hill, S. C.

Gilbert B. Heath, president of the Manetta Mills, at Lando, S. C., and Monroe, N. C., has been re-elected a member of the board of directors of the People's National Bank of Chester, S. C.

Frank Wilson, production manager of Marshall Field & Co., with headquarters at Spray, N. C., has been appointed co-chairman of the program for civilian defense in this community.

W. P. Hamrick, who retired last year after having been general superintendent of the Pacific Mills, at Columbia, S. C., for many years, has announced his candidacy for City Council in the forthcoming municipal primary.

Preston S. Marchant, son of the late T. M. Marchant, president of Victor-Monaghan Mills, Greenville, S. C., is one of the 225 young men receiving Marine commissions as second lieutenants after several months of study at the Quantico, Va., base.

W. A. L. Sibley, who has been vice-president and general manager of the Ware Shoals (S. C.) Mfg. Co., has resigned that position to become vice-president and treas-

urer of Monarch Mills, with plants at Union and Lockhart, S. C.

E. A. Hill, superintendent of the Clinton Cotton Mills and the Lydia Cotton Mills, Clinton, S. C., is undergoing treatment at the Mercy Hospital, Charlotte, N. C.

Walter B. Pratt, of Charlotte, N. C., Southern manager of Sykes, Inc., has returned to his home after several weeks in a hospital while undergoing treatment for a severe stomach ulcer. Mr. Pratt expects to spend some time in Florida before returning to his office.

Luke Castile Recovering

Luke J. Castile, Keever Starch representative, is convalescing from a recent operation, as noted in the February 1st issue. He expects to be back at work within the next few weeks.

Harry E. Smith Elected To Rubber Assn. Board

Harry E. Smith, general manager of the Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc., was elected a member of the board of directors of the Rubber Manufacturers' Association, Inc., at a meeting of the board on Tuesday, January 20th. Mr. Smith replaces F. L. Curtis, former general manager of the Manhattan Div., whose resignation from the board was accepted with reluctance.

Falls Thomason Undergoes Operation

Falls L. Thomason, popular and well known Southern representative for the New York & New Jersey Lubricant Co. (Non-Fluid), recently underwent a serious operation at Charlotte Memorial Hospital.

Mr. Thomason's condition is reported as good, though he will have to remain in the hospital for several weeks.

Promotions of Officers At Erwin Cotton Mills Co.

At the annual meeting of the stockholders of the Erwin Cotton Mills Co., K. P. Lewis was re-elected president of the company. The offices of the two vice-presidents of the company had become vacant due to the recent resignation of John Sprunt Hill and the death last September of J. C. Thorne, of New York. Wm. H. Ruffin, who has been serving as secretary and treasurer was elected vice-president and treasurer, and Carl R. Harris, who has been serving as assistant secretary and treasurer, was elected vice-president and assistant treasurer. E. G. McIver, who has for many years been a member of the board of directors of the company, was elected secretary, and N. A. Gregory, employed by the Erwin Mills for some ten years, was elected assistant secretary.

The following were re-elected to the board of directors: K. P. Lewis, John Sprunt Hill, J. Harper Erwin, J. P. Watson, Forrest Hyde, Geo. Watts Hill, Wm. H. Ruffin, Carl R. Harris and E. G. McIver. LeRoy Martin, vice-president of the Wachovia Bank & Trust Co., and trust officer in their Raleigh branch, was elected to fill the vacancy of J. C. Thorne on the board.

SERVING THEIR COUNTRY

HONOR Roll of former textile mill employees or sons of textile mill employees who are now in uniform in the army, navy, marines or air forces. We will welcome similar lists from other mills.

Fairfax (Ala.) Mill Div. West Point Mfg. Co.

O. Yale Lewis
Charles H. Crump
H. Grady Webb
Nathan Adams
Fred Camb
Gibson Atchison
E. B. Trigg
Milford Brown
Fuller Hadaway
Jay Padgett
Wheeler Lovelace
Edwin Arnette
James C. Nix
Ulmont Bonner
James E. Carson
Burl J. Fetner
Gaines E. Dixon
Hubert C. Walls
Walter Weldon, Jr.
James L. Barnes
G. W. Adams
Alvin D. Waller
Edward Earl Wilder
Flen Chambley

Henry A. Storey
Leonard B. Redd
Philip Crowder
Harold L. Nealey
Howard J. Haynes
Paul L. Hall
Robert L. Wilkerson, Jr.
Duel E. Sprayberry
C. V. Beck
Branson M. Floyd
Curtis E. Hall
Ralph W. Ballard
Charles E. Waller
Charles L. Edwards
Floyd Rice
Cornelius H. Hudson
Austin C. Smith
Alvin Smith
Charlie C. Simmons
Obie Clifford Fuller
John C. McDonald
Thurston Thornton
Otis E. McGhee
Willis F. Dorman

Mandeville Mills, Carrollton, Ga.

J. R. Newell
Hubert Phillips
Howard Stamps
Herbert Cosper
Earl Akins
Charles Miles
Donnie V. Pitts
H. A. Thompson
W. L. Mitchell

Carl Smith
Thomas Parker
Francis Whitlock
Hubert C. Lambert
J. Edward Jones
Julian C. Freil
Lloyd Smith
W. H. Lambert

Corsicana Cotton Mills, Corsicana, Tex.

Norman Brinkley
(Somewhere in China)
Sam Crabb
John Mills
C.C. Nowak
Pete McCain
Durwood Pratt
Bill Prewitt
Troy Cooley
Douglas Hill
Tom Peebles

Stanley Walker
Eddie Quinn
R. H. Mayo, Jr.
Emory Holloway
Cecil Bondurant
Ronald Moses
Richard Hoggatt
Jack Potts
C. A. Whitlock, Jr.
Edwin Benfield

Laurens Cotton Mills, Laurens, S. C.

Charles Adams
J. Waiters Anderson
Leroy Barrett
George K. Bailey
James D. Boggs
Cameron Brown
Bobbie Bull
Russell Casey
Luther H. Chestein
Frank J. Crocker
Ewell Culbertson
Ernest J. Davis
Clarence Davis
Harold Davis
Leroy Davis
Ray Wardell
James R. Wardell
Vernon Watson
James C. Finley
Harold Garner
Wyatt Garrett
Ernest Harrison
Jim S. Henry
Lonnie O. Hiers
Alton Hellams
Deward Jennings
Joe B. Kirby

C. Edward Leroy
George Miller
J. D. Mills
Wm. Clyde Moore
Melvin Murray
John S. Murphy
Wm. T. Watson
George C. Williams
Raymond Williams
Robert Moseley
Randolph Nelson
Jack O'Shields
R. P. Powell
Wm. Jackson Powell
Leon Putnam
Porter R. Phillips
James W. Reid
David Seay
Elmo J. Smith
Belvin H. Spires
Ernest Sullivan
Allen Templeton
James Tumblin
Earl Wardell
Leon Wright
J. Thomas Woods
Oscar Waldrop

Carolina Loom Reeds are made in a Modern, Well Equipped Plant



Today's high speed production is an "acid test" for all kinds of equipment. We know that

Carolina Loom Reeds Can "Take It" because only high quality materials and skilled workmanship go into their manufacture.

TRY CAROLINA LOOM REEDS ON YOUR LOOMS AND NOTE THE DIFFERENCE

CAROLINA LOOM REED COMPANY

GREENSBORO, N. C.

OBITUARY

FRED L. SMYRE

Gastonia, N. C.—Fred L. Smyre, 61, prominent Gastonia industrialist, died suddenly at his home January 30th after a heart attack.

Mr. Smyre had been in failing health for some time, but lately had shown some improvement. He had recently returned home from a Charlotte hospital, where he underwent treatment for about six weeks.

Mr. Smyre was one of the leading textile executives of this section. He was president of A. M. Smyre Mfg. Co. and president of Moroweb Cotton Mills Co., which operates the Moroweb Cotton Mills at Dallas. Two large textile plants, the Smyre No. 1 and Smyre No. 2 are operated by the A. M. Smyre Mfg. Co. He was also a member of the board of directors of the Ruby Hill in South Gastonia and a director of numerous other textile companies.

A native and life-long resident of Gastonia, he was born here November 15, 1880, and thus passed his 61st birthday last November 15th.

In association with his father, the late A. M. Smyre, he pioneered in the development of the textile industry in Gaston County. Prior to his participation in the development of the Smyre textile interests he was associated with his father in the operation of the old Gastonia Hardware Co.

H. H. ILER

Greenville, S. C.—Henry Hammett Iler, 55, well known figure in Southern textile circles and since 1929 plant engineer for Union Bleachery, died early in February.

Mr. Iler's death, which followed one week of illness, occurred at a Greenville hospital. Countless friends will be saddened by his passing.

A son of the late James F. and Susan (Rice) Iler, he was born at Piedmont on June 10, 1886. An expert mechanic, he engaged in textile engineering over a long period of years, and was a member of the American Society of Mechanical Engineers. He was also a past president of the Southern Textile Association.

He is survived by his wife, Mrs. Ina Gunter Iler, formerly of Hillsboro, N. C., by one son, Frank R. Iler, of Natchez, Miss., and by two daughters, Mrs. Ralph Norman, of this city, and Mrs. M. L. Huckabee, of Clemson College.

LELAND S. BUTLER

Greenville, S. C.—Leland S. Butler, 44, retired textile chemist, died here after a long illness. He had been affiliated years ago with Southern Franklin Process Co. here and with plants in Burlington, Mount Holly and Belmont, in North Carolina.

R. D. COLE

Newnan, Ga.—R. Duke Cole, 87, president of the R. D. Cole Mfg. Co., one of the most important industrial enterprises in this part of the South, died at his home here January 27th after a lingering illness.

Mr. Cole had been president of the company for 30 years and had been associated with it in one capacity or another for 70 years.

The R. D. Cole Mfg. Co., producers of fabricated steel,

now engaged in important defense work, was established by Mr. Cole's father and his father's brother.

Mr. Cole was also chairman of the board of the Arnco Mills, at Newnan, and formerly was connected with the Newnan Cotton Mills as a member of the board. He had important business interests in Atlanta, banking and otherwise, and was interested in many Newnan enterprises in addition to the Cole Mfg. Co.

JOHN T. JOHNSON

Asheville, N. C.—John T. Johnson, 60, treasurer of the American Enka Corp., died February 1st in an Asheville hospital. Mr. Johnson was stricken with pneumonia. Prior to his connection with the rayon firm, Mr. Johnson was with the Carnegie Steel Corp., and the Pittsburgh Steel Co. He was treasurer of the latter firm for several years.

Human Hair Cloth

Vichy, France.—Whiskers and other human hair swept from barber shop floors are a new source of material for milady's dresses, shoes, gloves, hats and handbags. Called piloita, cloth made from human hair costs 100 francs a square meter (about \$1.75 a square yard), which is much cheaper than woolens or silks. All types of human hair go into the composition of the cloth, which is pressed under steam and comes out uniformly grey, which the makers say is the basic color of all human hair when it loses its pigment coloring.

Inspectors Report On Textile Inspection Campaign in North Carolina

Of 173 textile manufacturing plants of North Carolina inspected between November 1, 1941, and January 15, 1942, a total of 51 establishments were found in serious violation of the Wage and Hour Law, according to the N. C. Department of Labor.

Eleven plants were failing to comply with the minimum wage provisions of the Fair Labor Standards Act and 29 were violating the overtime compensation requirements. Eleven miscellaneous violations were uncovered, including two violations of the child labor provisions. A total of 124 plants were found in violation of the record-keeping requirements, but approximately half of these did not constitute serious violations.

The establishments inspected so far in the industry-wide inspection campaign employ some 66,000 workers who are entitled to the benefits of the Fair Labor Standards Act. About 500 plants employing approximately 150,000 employees covered by the Act are slated to be inspected in the course of the drive for compliance.

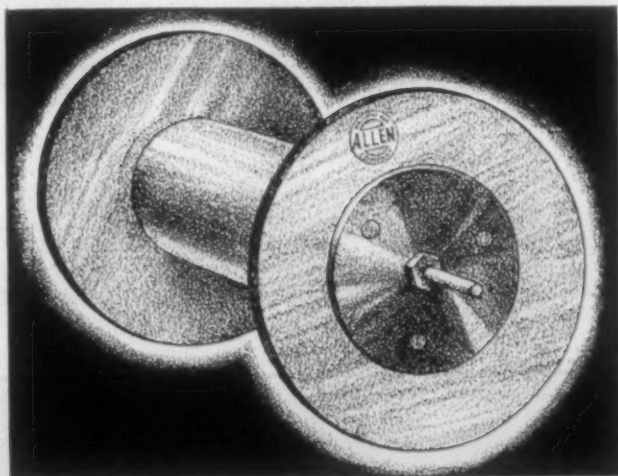
Commissioner Shuford pointed out recently that the average wage paid in North Carolina textile establishments is considerably higher than the minimum wage rate of 37½ cents required by the Wage and Hour Law.

Inspections in the textile industry are being conducted by inspectors of the State Department of Labor through a co-operative agreement between the department and the Wage and Hour Division, United States Department of Labor, under which the State Department of Labor acts as the enforcement agency of the Wage and Hour Law in North Carolina.

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- ★ produce the largest perfect package.
- ★ have longer life.
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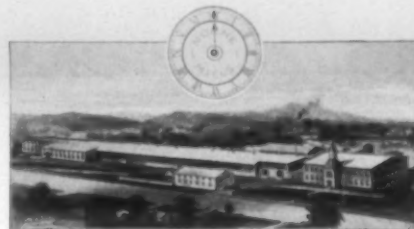
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TEXTILE BULLETIN

Member of
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Papers, Inc.

Published Semi-Monthly By

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Ellis Royal - - - - - Associate Editor

SUBSCRIPTION

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Mill Gardens

Now is the time to encourage and plan individual and community gardens for every textile mill village in the South.

Gardens should be planned not only to provide vegetables for spring and summer consumption but for a surplus which can be canned and used during next fall and winter.

According to Government statistics the cost of living has advanced about 18 per cent, and although measures have been taken to prevent inflation, it is possible for prices of foodstuffs to go much higher.

The textile industry of the South is fortunate in that the mill village is the rule and that almost every cottage has space for a garden.

The adoption of "war time" will give the morning shift many hours of daylight after they leave the mill and therefore the opportunity to do garden work.

We look with much favor upon the mill community garden where an experienced farmer or gardener does the plowing and devotes his entire time to the plot but has the assistance of the mill employees in planting and cultivation.

A few acres can, under the supervision of an experienced man, produce foodstuffs in large volume.

The Government has already announced plans for canning units which will be available to all citizens, but to those who expect to do canning there will be the problem of securing glass jars and rubber bands or other material for sealing them air tight.

We do not know to what extent rubber bands will be available, but an inferior brand of rubber will probably be satisfactory and it may be that felt bands will answer the purpose.

Mill gardens will do much to reduce the cost of living of mill employees and now is the time to make plans and to be sure that there is a supply of jars and rubber bands for canning.

Costly Carelessness

Because we were careless about watching a prospective enemy, we lost several battleships, together with many of our best bombers and fighting planes at Pearl Harbor.

Carelessness permitted a ship to crash and sink one of our submarines off Panama.

Carelessness permitted welding to be done on the superstructure of the \$60,000,000 ship Normandie, the deck of which was covered with bags of a very inflammable material used for mattresses and that ship, although badly needed for the transportation of troops, is half buried in mud.

In the grim struggle there is no place for carelessness and the men whose carelessness results in any such losses, as stated above, should be punished as we would any enemy who caused that much destruction.

When Spring Comes

The Russians and the bitter winds of Russia has resulted in the Germans being driven back all winter and people are wondering what will happen when spring comes and winter is no longer a factor.

Normally spring comes to central Russia between the middle and end of March, but then the thaw begins and when there has been heavy snows, as this year, the thaw lasts for two months, and the period of the thaw is the most difficult time of all for military operations.

Not only will the roads be impassable but the rivers will be filled with blocks of ice rushing down with destructive force.

During the thaw there will be little activity by either the Germans or Russians, and if the Germans are to make a new drive it will begin early in May, whereas their drive of last year began on June 22nd and in November they had failed to reach either Leningrad or Moscow.

When the German drive begins they will probably be further east than on June 22nd last year but they will have less equipment and many of their best divisions will be missing.

The Russians have also lost much material but the armament plants they moved from western

Russia will be in operation in their new locations and they will have received many tanks and planes from the United States.

It is understood that Russia has been training several million reserves, whereas it is doubtful if Germany will have many to replace the soldiers they have lost during the winter.

When spring comes in Russia, there will be the thaw and when the thaw passes the world will witness a gigantic struggle which will go a long ways towards determining the fate of Germany.

Editorial of February 1st

After the Pearl Harbor incident we stated editorially and in conversations that we would offer no criticism until the investigation, then being made by a committee headed by Associate Justice Roberts, had been completed and we had learned the facts.

When we did read the report we were so incensed by the stated derelictions of duty of Admiral Kimmel and General Short that we wrote the editorial, "Digusted," which appeared in our February 1st issue. Unfortunately we were called away from Charlotte before we had an opportunity to reread and revise the editorials of that issue, which is our usual practice, and some of our statements were rather stronger than they would otherwise have been.

Maj. Stuart W. Cramer, Jr., president of the Cramerton Mills, Inc., and a graduate of West Point, feels as we do about the dereliction of duty by the commanding officers, but wishing to defend his alma mater against our charges as he interpreted them, has written the letter which we are publishing upon the following page.

In the editorial in question we stated:

"It has long been recognized that West Point and Annapolis have been breeding grounds for A TYPE OF SNOBBERY which is entirely unjustified and which is a detriment to our military forces."

Our reference to snobbery was not to snobbery in the ordinary sense but as stated to "A TYPE OF SNOBBERY" by which we meant that the graduate of West Point seems to feel that his military knowledge is superior to that of the man who has not had the benefit of the training given at that institution.

On the next page we are also publishing extracts from the Roberts Report on Pearl Harbor which seem to us to show that the War Department at Washington did everything it could to awaken Admiral Kimmel and General Short to the seriousness of the situation and to urge them to be on guard against a surprise attack.

Anyone who reads the statement made by impartial investigators, must admit that something

was wrong if those communications did not cause Kimmel and Short to hold frequent conferences and take steps to guard against a surprise attack.

There must have been some reason why so little attention was paid to repeated warnings from Washington, and from reading the report we gathered the impression that Kimmel and Short thought that it was beneath their dignity to pay attention to statements, about military matters, issued by Secretary Knox and Secretary Stimson, neither of whom were trained in military affairs. Possibly we did not use the right words but we referred to their attitude as a "type of snobbery."

We were under the impression that General Short was a West Point graduate but find that such was not the case. That may be part of the explanation of the failure of Admiral Kimmel to hold conferences with him.

Recently Admiral Kimmel and General Short have asked to be retired, which means that if their request is granted, they will draw salaries for the remainder of their lives.

It seems to us that they must have colossal nerve to ask the taxpayers of the United States to support them in idleness after they have caused such losses through gross dereliction of duty. What did we get for the twenty or more years of salary already paid them?

Accident Prevention Number

Our issue of March 1st will be our ACCIDENT PREVENTION NUMBER and it will contain many articles dealing with the causes of accidents in textile mills and the prevention of same.

We believe that it will be the best and most complete collection relative to accidents in textile mills which has ever been compiled.

Realizing the cost of accidents and the value of giving employees information relative to their prevention, many mills have placed orders with us for extra copies of the ACCIDENT PREVENTION NUMBER with the idea of distributing them among their overseers and other employees.

We will be pleased to accept additional orders for the March 1st issue provided they are mailed immediately upon the order blank printed upon page 36-C of this issue. Due to the shortage of paper we cannot afford to print more of the March 1st issue than enough to cover our subscription list and the extra orders on hand when we begin the printing. After printing begins about February 23rd, it will not be possible to accept additional orders.

Extracts From Roberts Report On Pearl Harbor

(See editorial page reference)

THE following are extracts from the report on the Pearl Harbor incident made by a committee headed by Owen J. Roberts, Associate Justice of the United States Supreme Court, after a detailed investigation which included a visit to the Hawaiian Islands.

* * *

The responsibility for the joint defense of the Hawaiian coastal frontier rested upon the commanding general, Hawaiian Department, and the commandant 14th Naval District, the latter acting as a subordinate of the commander-in-chief of the Pacific fleet.

* * *

The responsible commanders in the Hawaiian area were aware that previous Japanese actions and demonstrated Axis methods indicated that hostile action might be expected prior to a declaration of war.

* * *

November 24, 1941, the chief of naval operations sent a message to Admiral Kimmel in which he stated that in the opinion of the Navy Department a surprise aggressive movement in any direction by the Japanese was possible.

* * *

On the same day (November 27, 1941) the chief of military intelligence sent a message to the intelligence officer on the staff of the commanding general, Hawaiian Department, directing him to inform the commanding general and his chief-of-staff that negotiations with Japan had practically ceased; that hostilities might ensue; and that subversive activity might be expected.

* * *

November 28, 1941, the commanding general, Hawaiian Department, received from the adjutant general of the army a message stating that the critical situation required every precaution to be taken at once against subversive activities, within the scope of the army's responsibility; that all necessary measures be taken to protect military establishments, property and equipment against sabotage, against propaganda affecting army personnel, and against all espionage.

* * *

November 30, 1941, the chief of naval operations sent a despatch to the commander-in-chief of the Asiatic fleet, and also forwarded the message to the commander-in-chief of the Pacific fleet for his information, in which it was stated the indications were that Japan was about to launch an attack on the Kra isthmus, directing the commander-in-chief of the Asiatic fleet to do certain scouting.

(Continued on Page 40)

A Letter From Stuart W. Cramer, Jr.

(See editorial page reference)

CRAMERTON MILLS, INC.

CRAMERTON, N. C.

February 4, 1942.

Mr. David Clark, President,
Clark Publishing Company,
218 W. Morehead Street,
Charlotte, N. C.

Dear Dave:

I have just received the February 1st number of your

Textile Bulletin, containing the editorial headed "Disgusted." I refer particularly to the excerpts quoted below:

"According to authentic figures, the cost of educating a young man at either West Point or Annapolis is about \$10,000, and after spending that amount upon Admiral Kimmel and a similar amount upon General Short, and having paid both of them substantial salaries over a long period of years, the people of the United States find that they produced two men who were willing to risk the military property of this country and the lives of the soldiers intrusted to their care, rather than go beyond the limit of the snobbery which they had acquired.

"These graduates of West Point and Annapolis appeared to feel that it was beneath their dignity to pay any attention to warnings sent by the War Department presided over by Secretary Knox and Secretary Stimson, neither of whom had acquired imaginary social standing by attending the institutions mentioned above."

* * *

"It has long been recognized that West Point and Annapolis have been breeding grounds for a type of snobbery which is entirely unjustified and which is a detriment to our military forces."

* * *

Neither you nor any other American citizen could be more shocked or disgusted than I by the Pearl Harbor incident, and by the failure of our military and naval commanders on the scene to live up to their great responsibilities.

To use that tragedy as an occasion for airing your personal views regarding West Point and Annapolis, and for vilifying them and their graduates in your most unrestrained style would appear to me beyond the reasonable privilege of editorial opinion, even if your facts were correct.

As a matter of fact, the premises upon which you built up your disgusting conclusions are false and misleading. General Short is not a West Point graduate, but was appointed to a commission in the Army from civil life after receiving an A.B. degree from the University of Illinois in 1901.

Based as they were upon such flagrant distortions of the facts, it is only to be expected that the conclusions you reached should be equally misleading, but I shall not enter into a discussion with you as to the value of these institutions, nor as to the past or present services rendered to the country by their graduates. The record stands for itself.

Neither West Point nor Annapolis need any defense by me, nor by anyone else, but as a graduate of one and as the son of a graduate of the other, I cannot ignore your untruthful and defamatory attack upon them. Believe me, it is very painful for me to write to an old friend in this fashion, and I hope that when you have got the facts straight, your opinions will be correspondingly rectified. I hope, too, that in your next issue you will give this letter the same prominence that you gave to the editorial in question.

Sincerely yours,

S. W. CRAMER, JR.

DYEING AND FINISHING

Meeting New Fastness Specifications By Old Methods Modernized

By George Broun

NCESSITY is the mother of invention, so during this national emergency textile chemists and dyers are doing lots of "heavy" thinking and producing results.

The textile wet processing and dyeing industry has become quite spoiled over the past ten years through the great increase in newly-discovered valuable and useful textile chemicals, dyestuffs, bleaching and finishing agents that have been offered them. In fact, a smart textile chemist or dyer has had many of his difficult problems solved by the proper use of these products brought on the market. Now this situation has changed quite radically, due to our war-time emergency practically all of the imported textile specialty chemicals and dyes are no longer available.

The national defense requirements are gradually reducing to a minimum the number of domestic made textile chemical and dyestuff specialties. This situation requires study and inventiveness on the part of the dyer, textile chemist and finisher to keep his production coming through without much of a change in the plant's procedures as to affect the quality of the finished goods.

Whenever a plant is processing goods for the Government, the mill officials have no great worries over all the textile chemicals and dyes that they find necessary, but this is not true on non-defense processing work. On non-defense processing work the dyer, chemist and the finishing plant officials are all jointly "off on a limb" but the vast majority of these men are taking it with a smile and doing a fine job because they are "thinking through" their mill problems.

The plant dyer is instructed to prepare a range of shades meeting the following fastness properties on cotton-spun rayon sizes:

Fabric No. 1.—Shades must be fast to No. 2 A. A. T. C. C. wash test method (120° F., Launderometer)¹ and possess a fastness to light of approximately 20 hours Fadeometer exposure plus good fastness to perspiration.

*Fabric No. 2.*²—Shades must be fast to No. 3 A. A. T. C. C. wash test (160°., Launderometer) without any requirements for light fastness.

*Fabric No. 3.*³—Shades must meet A. A. T. C. C. No. 3 wash test, show light fastness of 40 Fadeometer hours.

This is a full request under ordinary conditions but it can be worked out and such requirements are being met at plants by selection of colors and aftertreating agents. Naturally the dyer may have to pass up those colors that he prefers for ones that are still available, but careful study and working of processing methods will give him a fairly satisfactory range of colors to meet these three different fabric specifications. To meet the fastness specifications of Fabric No. 1, a piece goods dyer would have formerly used a list of selected fast-to-light direct colors, dyed them direct, finished off with a warm wash of 120° F. and then given a urea-formaldehyde finish, but obtaining such a selected range of moderate priced fast-to-light direct colors is now not feasible. The dyer's second choice would be to use the direct, diazo and developed colors, but investigation shows that these colors are becoming scarce and it would be difficult to obtain a range of shades. Now the dyer falls back on an old-timer, the less expensive direct colors that are aftertreatable with sodium bichromate and acetic acid. Where this range of colors might not permit a complete range of shades, a dyer can use various other direct colors that possess a fairly good wash fastness when aftertreated.

	Index No.
Direct Brown GR	598
Direct Black R	582
Direct Black E	581
Direct Black O	395
Direct Chrome Blue Black B	—
Direct Chrome Black G	—
Direct Brown 3R	598
Direct Fast Orange R	621
Direct Fast Red F	419
Direct Blue RW	512
Direct Sky Blue 6B	520
Direct Brown BGN	596
Direct Catechine 3G	Prototype 69
Direct Catechine G	Prototype 70
Direct Catechine B	—
Direct Green G	594

^{1, 2, 3.} Pages 186-187 in 1941 Year Book, American Association of Textile Chemists and Colorists.

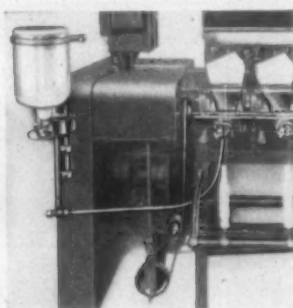
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If the dyed shades show too dull, a dyer can add several of the formaldehyde aftertreated direct colors to the list, using these for the light and medium depth shades which are usually greatly dulled and changed by the bichrome and acetic aftertreatment.

Fabric No. 2 requires exceptional wash fastness with only moderate light fastness. To meet these fastness specifications, a dyer formerly used a selected range of developed colors and developed them with Naphthol AS, Developer MTD, and Developer Z, in some cases Beta Naphthol was used. This gave a fairly satisfactory range of dark greys, blacks, blues, navies, rusts and browns. To duplicate this range of shades, a dyer turns to what is commonly referred to as the "para" direct dyeing colors which may be coupled with Fast Color Salts, then given a hot soaping off treatment whereby they will pass the No. 3 A. A. T. C. C. wash tests. This type of direct colors are selected from colors that possess the Amino group (NH₂) suitably located in its chemical structure whereby it will combine or couple with Fast Color Salts. In fact, this group of colors are very similar to the average developed color and many of the developed colors can be used satisfactorily. A list of colors that will prove of value in meeting these requirements would be:

	Index No.
Erie Orange R	478
Direct Black RO	395
Direct Orange CR	621
Direct Black E	581
Toluylene Orange R	478
Direct Brown GR	598
Developed Green 3G	—
Developed Bordeaux 7B	Prototype 77
Direct Primuline	812

The Fast Color Salts or Fast Color Bases to use diazotized are:

Fast Red 3GL	Pranitriline
Fast Scarlet GG	Fast Red GG
Fast Scarlet R	Fast Orange R

From this range of direct colors and developers (Fast Color Salts and Bases) a dyer can obtain some very fast to washing combinations.

Fabric No. 3 presents a very rigid set of fastness requirements and one that is difficult and sometimes is rated impractical from a production viewpoint. Dyers are now trying those direct colors that can be aftertreated with Bluestone (copper sulfate) and acetic acid. This aftertreatment requires aftertreating the directly dyed shades at 170-180° F., then soaping off at a high temperature of 160-180° F. with soap and a mild alkali such as soda ash or tri sodium phosphate, then hot washing and finishing. Two groups of colors, now being offered for this purpose are the Copratine and Benzo Copper Fast. In addition to these colors there are quite a few well known direct colors that will prove of interest for this method of aftertreatment. These colors are:

Direct Purpurine 10B	Direct Blue RW
Direct Azurine G	Direct Brown 3RB
Direct Sky Blue 6B	Formaldehyde Black G

The textile chemist may by careful selection find other colors that will show greatly improved wash and light fastness under this severe aftertreatment method. He must be content with the improved fastness obtained and

not worry too much over close matching of shades, as there is such a radical change in shade from the direct dyed untreated shade to the Bluestone aftertreated one that a dyer must be a magician to match them closely under such circumstances.

4. Coprantine, Ciba Co.; Benzo Copper Fast, General Dyestuff Corp.

Mistrial in Trial of Man Who Shot Mizell

The trial of Wm. D. Benton for the killing of C. W. Mizell, president of the Opp Cotton Mills, and Micolos Cotton Mills, resulted in a mistrial, because the jury could not agree, and will be heard again at the next term of court.

Mr. Mizell was shot by defendant near the First National Bank of Opp near noon on November 6, 1941, and defendant was indicted for first degree murder by a Covington County grand jury on December 8, 1941. Defendant was arraigned on January 9, 1942, at which time he entered a plea of not guilty and not guilty by reason of insanity.

The State offered evidence to show that Benton passed the bank several times the morning of the shooting looking for Mr. Mizell, and also passed and looked in the window of the Mizell Insurance Agency for him, and contending that defendant was lying in wait for the decedent. The testimony showed that immediately before the shooting Mr. Mizell was standing out in front of the bank talking with Mr. Sem Berman, and after Berman completed the conversation he went south down the street and Mr. Benton came from the corner of an alley between the bank and Benton Mercantile Co. and went up to Mr. Mizell, putting his left hand on Mr. Mizell's right shoulder; that Benton spoke a few words and Mr. Mizell shook his head, and that Benton then pulled his gun and began firing. He fired three shots, all of which took effect in Mizell's chest and stomach. These bullets pierced Mr. Mizell's necktie which was offered in evidence.

The defense abandoned entirely the plea of insanity but pleaded self-defense. The defendant claimed that Mr. Mizell drew a gun from his pocket but no gun was found and no one except the defendant has testified that a gun was seen in Mr. Mizell's hands.

Richard C. Urban Joins Jay J. Merlein Co.

Richard C. Urban has become a member of Jay J. Merlein Co., Inc., manufacturers of advertising identification, where he will take charge of promotion and sales. Mr. Urban was with North American Rayon Corp. more than 12 years and was associated with the identification and testing program of that company's advertising department.

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Textile Forum Makes Impressive Debut

The first issue of the new *Textile Forum*, published by students in the N. C. State College Textile School, Raleigh, N. C., has made its appearance on the campus and attracted considerable favorable comment on format and contents.

Dedicated to Dean Thomas Nelson, who has headed the Textile School for over 40 years, the first issue contains 32 pages and carries a generous amount of advertising. The cover is attractively designed in red, white and black, and carries space for a picture with each issue. Present plans are to print two more issues this year.

Able-presented articles in the first issue deal with spun rayon warp sizing, immunized cotton, test tube textiles, silk substitutes and their future and other items of interest to the industry, including a question and answer section, trade notes and lists of alumni and advertisers.

A feature is a page of new fabrics, with samples of the cloth pasted by their descriptions. The staff did this work by hand.

Liberal illustrated with attention-catching photographs, the *Textile Forum* reflects an excellent grade of engraving and printing. It was produced in the College Print Shop and is affiliated with the College Board of Publications.

Robert L. McLaughlin, of Pittsburgh, Ga., is editor of the new magazine, and Waldon Trescott, of Raleigh, is business manager. Other members of the editorial staff are Wallace M. Sutton, of Rocky Mount, managing editor; K. A. Shinn, China Grove; W. B. Whitehurst, Greensboro; and F. D. Quinn, Jr., Shelby. On the business staff are C. L. Hedrick, Cary; A. Brotman, Newark, N. J.; O. Max Gardner, Jr., Shelby, and H. C. Nixon, Hertford.

Morton H. Lamport, of New York City, is circulation manager, and members of his staff are W. S. Williams,

Middlesex; E. W. Norwood, Beaufort; W. B. Hilburn, Bladenboro, and J. W. Folley, Aberdeen.

Present plans are to issue the magazine quarterly, with a faster rate of issue planned for the next school year. An intensive campaign for circulation is underway. In the first run, 1,500 copies were produced.

Longer Staple Cotton Needed

Washington, D. C.—Plans to encourage growers to shift from the production of short staple cotton to the longer staple length in 1942, to make available types needed to meet military requirements, have been announced by the Agriculture Department.

The Commodity Credit Corp. will increase the premiums to be offered on longer staple lengths of cotton under the 1942 cotton loan program.

In addition, the corporation will support the price of American-Egyptian and Sea Island cotton through a purchase program.

Growers will be asked the shifts within their present AAA acreage allotments.

The premiums and discounts will apply to all rain-grown and also irrigated cotton with a staple length of 1½-inch and longer.

Growers of American-Egyptian cotton have been asked to increase their acreage to at least 150,000 acres in 1942 and to make a record increase if the seed supplies will permit. About 136,000 acres of this cotton were planted in 1941. The department said growers of American-Egyptian cotton would be protected against serious price declines through an offer by the Commodity Credit Corp. to purchase this cotton, having a staple length of 1½ inches or longer, at a price of 35 cents a pound, net weight, for U. S. grade No. 1, 34 cents for Grade No. 1½, 33 cents for grade No. 2, 32 cents for grade No. 2½, and 30 cents for grade No. 3. The corporation will buy Sea Island cotton on the basis of 36 cents a pound for U. S. grade No. 2 with a staple length of 1½ inches.



VICTOR

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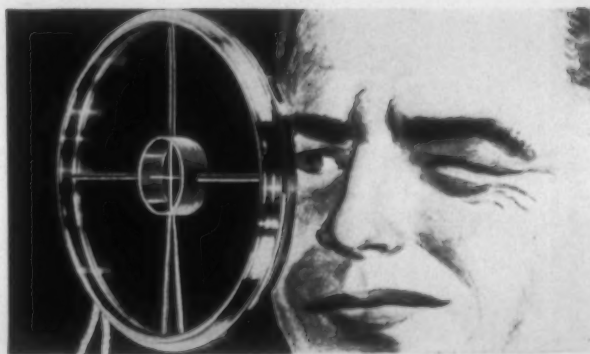
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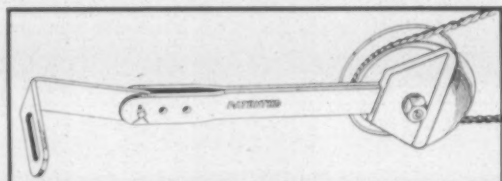
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WANTED—Position as Overseer Weaving. Box work; Dobbies, Cashmer heads, Jacquards, etc. 48 years of age. References. Write "Weaver," c/o Textile Bulletin.

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- 6-Wet Tape Drive Twisters, 2½"
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- 3-Whitin C Combers, 12" Lap.
- 3-S-L 10 x 5 x 108 Spindle Slub-
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- Five Crompton & Knowles Looms,
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- One Saco-Pettee 56-Spindle Slub-
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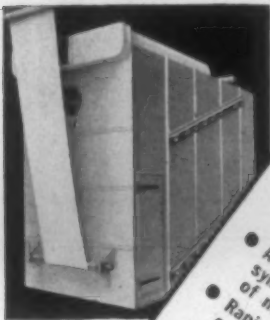
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110-volt, 3-phase, 60-cycle.
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- 1-12x10 Air Compressor.
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STRAPPING TOOLS



THE STANLEY WORKS

Steel Strapping Division
New Britain, Conn.



TRADE MARK

Extracts From Roberts Report On Pearl Harbor

(Continued from Page 36)

As early as October 16th the commanders were warned of the possibility of an attack by Japan on the United States and were directed to take precautions and make preparatory dispositions in the light of this information. A significant warning message was communicated to both the local commanders on November 24th.

* * *

While General Short and Admiral Kimmel conferred frequently with respect to joint army-navy plans and procedures, they did not, on or subsequent to November 27, 1941, hold any conference specifically directed to the meaning of the messages received from the War and Navy Departments or concerning action required to be taken pursuant to those messages.

* * *

On November 27th each responsible commander was warned that hostilities were momentarily possible. The warnings indicated war, and war only.

Both of these messages contained orders. The commanding general was ordered to undertake such reconnaissance and other measures as he deemed necessary. The commander-in-chief of the fleet was ordered to execute a defensive reemployment in preparation for carrying out war tasks. Other significant messages followed on succeeding days. These emphasized the impending danger and the need for war readiness.

In this situation, during a period of ten days preceding the Japanese attack, *the responsible commanders held no conference directed to a discussion of the meaning of the warnings and orders sent them, and failed to collaborate and to co-ordinate defensive measures* which should be taken pursuant to the orders received. Dispositions as a result of the messages were independently made by each commander. Neither of them informed himself of the measures and dispositions taken by the other.

* * *

These commanders failed to confer with respect to the warnings and orders issued on and after November 27th, and to adapt and use existing plans to meet the emergency.

The state of readiness of the naval forces on the morning of December 7th was not such as was required to meet the emergency envisaged in the warning messages.

Had orders issued by the chief-of-staff and the chief of naval operations November 27, 1941, when complied with, the aircraft warning system of the army should have been operating; the distant reconnaissance of the navy, and the inshore air patrol of the army, should have been maintained; the anti-aircraft batteries of the army and similar shore batteries of the navy, as well as additional anti-aircraft artillery located on vessels of the fleet in Pearl Harbor, should have been manned and supplied with ammunition; and a high state of readiness of aircraft should have been in effect. None of these conditions was in fact inaugurated or maintained for the reason that the responsible commanders failed to consult and co-operate as to necessary action based upon the warnings and to adopt measures enjoined by the orders given them by the chiefs of the army and navy commands in Washington.

The Japanese attack was a complete surprise to the commanders, and they failed to make suitable dispositions to meet such an attack. Each failed properly to evaluate the seriousness of the situation.

* * *

In the light of the warnings and directions to take appropriate action, transmitted to both commanders between November 27th and December 7th, and the obligation under the system of co-ordination then in effect for joint co-operative action on their part, it was a dereliction of duty on the part of each of them not to consult and confer with the other respecting the meaning and intent of the warnings; and the appropriate measures of defense required by the imminence of hostilities. The attitude of each, that he was not required to inform himself of, and his lack of interest in, the measures undertaken by the other to carry out the responsibility assigned to such other under the provisions of the plans then in effect, demonstrated on the part of each a lack of appreciation of the responsibilities vested in them and inherent in their positions as commander-in-chief, Pacific fleet, and commanding general, Hawaiian Department.

* * *

Regrettable loss of life and extensive damage resulted from the air raid.

Some Information, Predictions, Observations and Pointers On Care of Leather Rolls in Textile Mills

(Continued from Page 20)

bles in one department may often be traced to trivial carelessness in a preceding operation.

Under certain conditions, depending on the use to which the leather is to be put, certain oils are beneficial to leather, it but it has never been demonstrated that the type of oil used to lubricate roller bearings is of any use when applied to the leather. Don't let the oiler drip oil onto the leather of the rollers. Not only will the yarn be oily, but the leather on the rolls will not give satisfactory life.

Order Mills To Sell Silk To U. S. At Once

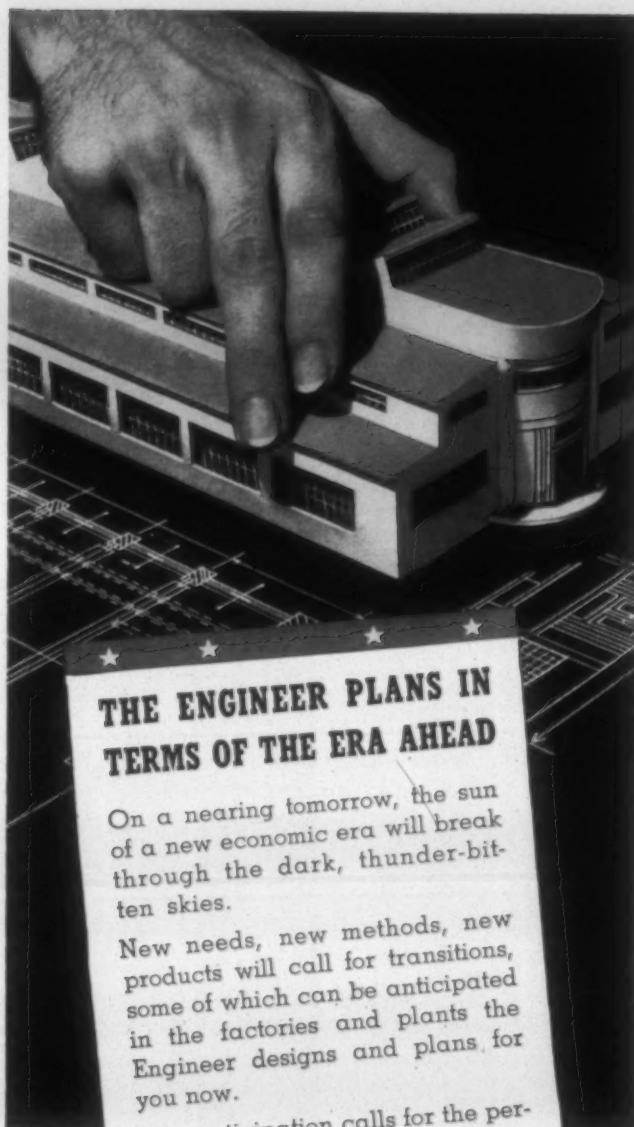
Washington, D. C.—The War Production Board on February 10th ordered all silk processors to arrange within 48 hours to sell their entire stocks of raw silk to the Government-owned Defense Supplies Corp., on penalty of having the silk requisitioned immediately.

The Inventory and Requisitioning Section of the board sent telegrams to mills, notifying them that the supplies were needed for war use.

The telegram declared:

"Government requires for war production all raw silk in the United States. Unless you arrange to sell your entire holdings of raw silk to Defense Supplies Corp. at ceiling prices within next 48 hours we will requisition your inventory.

The processors were instructed to reply by telegram, informing WPB whether or not they were willing to sell, and if they were willing, instructing them to give the location and size of the stocks in their possession.



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11,898,000,000 Square Yards of Cotton Cloth

Production by the cotton-textile industry in 1941 set a new record figure of 11,898,000,000 square yards, according to the annual report by W. Ray Bell, president of the Association of Cotton Textile Merchants, delivered to its members recently. The report reviewed Association's activities in aiding the industry to adjust itself to war requirements, and was followed by the election of directors for the coming year. Saul F. Dribben, of Cone Export & Commission Co., was re-elected to the board of directors. Three new directors were elected—John C. Hughes, of McCampbell & Co.; Gerrish H. Milliken, of Deering, Milliken & Co., and Robert D. Williams, of Callaway Mills, Inc. All will serve for three-year terms.

In his annual report Mr. Bell called attention to the fact that the Association of Cotton Textile Merchants "was born in the throes of the first World War," and stated that its initial effectiveness "was thoroughly tested in the problems of war procurement and post-war distribution of surplus textiles." Stressing national responsibility as a basic concern of the organization, as set forth in its constitution, the report called for production of cotton-textile mills "shaped to fit the specialized needs of the armed forces."

"It is vital, both for Worth Street and the cotton-textile industry at large," Mr. Bell stated, "that no effort of a voluntary nature be spared in completely satisfying these wants."

Citing the industry's defense and war effort in the past year, the report states that all previous records for spinning activity were broken, cotton consumption reached 10,575,000 bales, and 11,898,000,000 square yards of cloth were produced—2,300,000,000 square yards more than the previous record (1940) and 3,500,000,000 square yards above average annual production for the five years ending with 1939.

"As of November 1st," the report points out, "the Quartermaster General stated that purchases of apparel fabrics and findings were being procured on the basis of an Army of 3,200,000 men, while other clothing items and equipage had been purchased for 2,000,000 men. Military purchases during 1942 are sure to be far more than are needed by the present schedule of 3,600,000 men. This means, without any question, that a larger share of production will have to be devoted to military and naval goods. Huge programs for ducks and other tentage materials, drills and osnaburgs have already been announced."

Outlining the Association's contributions to national defense and war efforts, Mr. Bell reviewed relations with the Army, Navy and Government procurement and price control agencies. Current activities aimed at effective co-operation with Government and other war-time agencies include the Association's War Activities Committee, formed soon after the declaration of war "to marshal the collective intelligence of the market and direct it to the solution of procurement problems which involve broader participation or more intensive production."

Mr. Bell also cited the response of firms in Worth Street in the sale of defense bonds. "As chairman of the Cotton Goods Division in Greater New York," he said,

"I have been gratified to receive a number of reports in the last few days which show 100 per cent participation of employees. With the co-operation of other textile market associations, a large committee has been enlisted to cover all sections of the trade."

"While this report is naturally focused on war functions," Mr. Bell stated, "perhaps the greatest permanent achievement of the past year was the promulgation and trade adoption of the 1941 edition of the Standard Cotton Textile Salesnote and the Worth Street Rules. Like the original version of 1936, this document bears the signature of 13 buying and selling and producing organizations, operating in the Worth Street market."

All Rayon Grey Goods Under Ceiling Orders

All types of rayon grey goods not already covered are brought under maximum prices by a new amendment to Price Schedule No. 23 announced February 10th by Leon Henderson, Administrator of the Office of Price Administration.

According to the amendment, the ceiling price for any construction of rayon grey goods not now listed in the schedule shall be a price "in line with" the established maximum price for the nearest related construction. The term "in line with," the schedule states, means "having a justifiable relation to such maximum price with commensurate increases or decreases to give effect to the differences in costs of the yarn used and in weaving costs, taking into account changes in (1) the number of picks, (2) the number of ends, (3) the width, and (4) the weave."

Mr. Henderson stated that this amendment is a temporary measure and will be superseded in the near future by a further amendment that will establish specific maximum prices, expressed in dollars and cents, for a large part of the goods now being brought under a ceiling for the first time.

Contracts made before Feb. 10th for the sale of goods now brought under ceilings prices may be carried out in accordance with their terms.

Glen Raven Hosiery To Open Sales Office

Glen Raven Knitting Mills, Glen Raven, N. C., have withdrawn their account from J. P. Voorhees' Son Co., New York, effective about March 1st, it is announced by Dudley A. Voorhees. C. A. Potter and John Chadwick are resigning from the Voorhees Co. and will open an office in the Empire State Building for the sale of the Glen Raven production of full-fashioned hosiery.

Mr. Potter has been with the Voorhees Co. for twelve years. Mr. Chadwick resigned from Associated Merchandising Corp. about two years ago to join Voorhees.

U. S. Rubber Adds Part-Wool Hosiery

As a result of restrictions on rubber, the footwear division of the U. S. Rubber Co. is broadening its line of athletic stocks in combinations of wool, rayon and cotton.

The company previously made the socks on a limited basis. The new line will consist of five styles for men and one for boys and women. The wool content will range from 5 to 65 per cent.

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Cotton Goods Markets

New York.—The cotton gray goods market is reported to have done more business in the past month than in the preceding month, but this still is not sufficient to assure the requirements of civilian buyers who would like to obtain cloth.

Along with the diminishment of civilian releases, there has been a renewal of efforts on the part of converters and other mill customers to obtain Government priority business. The criticism is offered in market circles that some converting houses remained indifferent to Government contracts for too long a period. One merchant offers the forecast that in another six months those organizations that have not secured Government orders will be having a really difficult time.

The WPB's release of production against outstanding contracts of non-Government cotton duck for delivery during March was described as a "30-day breathing spell." It means, some merchants believe, that the WPB has not yet had time to complete its final, detailed allocation order.

Meanwhile, the pressure to obtain production for the 200 million yard Army-Navy order is said to be undiminished. No official word as to the exact status of this procurement has been given out, but market advices indicate a continuation of gradual progress. The development of single-yarn substitutes is said to have been particularly helpful.

Duck production boosts have made progress. In line with the suggestion that duck yarn be spun on idle tire fabric spindles and woven in carpet and other plants, it is learned that a New England tire fabric plant already is producing duck yarn and that other mills will soon add to the supply. Some upholstery plants are already preparing to weave duck, in addition to carpet mills now getting more generally into production.

Whether the WPB contemplates raising the original A-10 priority rating for the procurement of osnaburg needs remains a matter of conjecture. Bag manufacturers have told of obtaining limited to moderate quantities of osnaburgs and sheetings after cotton declined to 19.03 recently but the majority reported growing concern about future supplies as the Far Eastern situation worsened.

The ceiling prices on bed linen recently established by OPA has been accepted by manufacturers in the South as being satisfactory, according to report, but the Eastern manufacturers are said to be bitterly opposing the action. They think the ceilings should be raised.

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Cotton Yarn Markets

Philadelphia.—Cotton yarn continues to be shipped at an increasing rate, with a heavier percentage, however, going into military use than heretofore. Shipments of cotton yarn during the past month and a half are reported to be sufficient for civilian use for three or four months while at the same time the industry has shipped supplies sufficient to keep up with the armed forces needs. This condition is not likely to continue for much longer though, it is felt, and predictions are that there will be definite shortages of some civilian desired yarn in the future.

It is contended that attention should be called to the yarn industry's achievements in view of statements made to the effect that the spinners are turning down offers that do not carry preference ratings. It is pointed out that Government work concentrates directly on relatively few counts of sale yarn, particularly in the carded group. In combed yarn, of the total shipments made by Southern producers since January 1st, it is estimated here that more than half were for civilian account.

As outlined here, some yarn mills and distributors have experienced difficulty with customers trying to overbuy on the basis of preference rating, against which they originally purchased sufficient yarn to fully cover that particular procurement. It is pointed out that the War Production Board has been trying to get information on yarn mills' output of strategic counts and types of yarn, together with orders already booked against preference ratings and the rate of deliveries, etc. These mills, therefore, are described as anxious to prevent any overlapping of their obligations for Government work.

Also, they are said to prefer taking care of civilian demands with any production they may have, over and above the authentic requirements of the military.

In carded and combed yarn, the liberal margins provided for in the price ceilings, for twisting the yarn, are reported here to have discouraged the making of singles among the spinners having twisters, except where singles have to be furnished for military orders. Some in the local market say they have lately been unable to place new orders for single yarn.

Basis of 10s/1 ordinary grade of carded yarn, the spread now prevailing between single and two-ply yarn is about double the amount normally accepted in the industry as being satisfactory.

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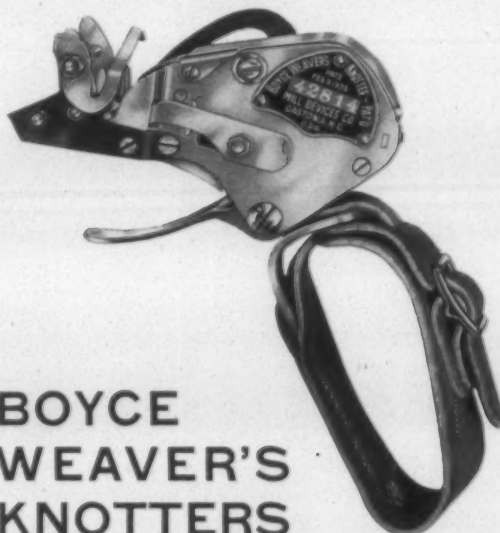
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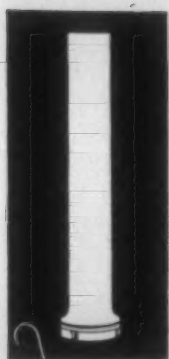
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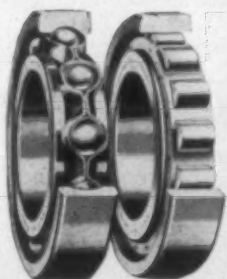


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GREENVILLE, SOUTH CAROLINA

OPA Amendment Eliminates Some Premiums for Quality Yarn

(Continued from Page 11)

As used herein, the term "American cotton" means all kinds of cotton grown in the United States except Sea Island, S X P, and Pima.

(D) Carded yarns which, because of special inspection, have regularly sold at a premium.

(E) Yarns with special constructions.

(V) Tinged and Part-Waste Yarn.

The maximum price for any tinged or part-waste carded yarn shall be the base maximum price set forth in (2) above, less the normal trade differential.

(C) Ceiling Date.

The maximum prices established herein become effective on February 3, 1942, which shall constitute the ceiling date for all carded yarns.

1307.61 . . . Effect of Amendments.

Unless the contrary is expressly provided in any amendment to this schedule:

(A) Such amendment shall not be deemed to affect the provisions of the schedule as they stood prior to such amendment.

(B) It shall be permissible for any person to make or accept delivery of carded yarns at the price agreed upon in a contract of sale or purchase entered into prior to such amendment, if such price was subject to and in conformity with this schedule when such contract was made.

(C) Deliveries made pursuant to contracts entered into prior to the effective date of such amendment shall not be made or accepted at prices higher than the maximum price applicable under the terms of this schedule as in effect when the contract was made.

1307.62 . . . Effective Dates of Amendments.

(A) Amendment No. 1 became effective as follows:

(1) That portion thereof designated as A became effective November 27, 1941.

(2) That portion thereof designated as B became effective as of October 6, 1941.

(B) Amendment No. 2 became effective as of October 6, 1941.

(C) Amendment No. 3 is effective February 3, 1942.

This amendment, No. 3, shall become effective February 3, 1942.

Issued this 2nd day of February, 1942.

LEON HENDERSON,

Administrator.

Reminiscences Of Ye Olde Cotton Factory

(Continued from Page 18)

the entire length of the line of cards. This box contained a belt about 12 inches in width and speeded to correspond with the sliver as it was delivered into this box and onto the belt thence to a machine called the railway head. The product from 8 cards usually went to one railway head. This machine was equipped with a set of fluted steel rolls, and beginning at the back, the speed of these rolls (top and bottom) increased by degrees so that a drawing down process resulted thus finishing the product of the railway head in a very favorable condition for the rest of its journey. Also the railway head was equipped with an evenner device which enabled the supervisor of this department to eliminate unevenness in yarn numbers to a surprising degree.

Revised Schedule On Combed Cotton Yarns

Washington, D. C.—The complete revision of the combed cotton yarn schedule No. 7, announced by Price Administrator Leon Henderson, has been made available. This order brings under maximum prices mercerized, "gassed" and bleached yarns, in addition to yarns "in the grey."

Also added to the schedule are ceiling prices for "commission" mercerizing, bleaching and gassing.

As changed, the schedule contains list of maximum prices, tied to the market price of raw "spot cotton," for all sizes of combed yarn "in the grey." These basic prices are the same as those that become effective on December 24th. All reference to yarns of "ordinary commercial quality" is eliminated from the new price provision. Specific premiums are listed for mercerizing, "gassing" (singeing), and bleaching.

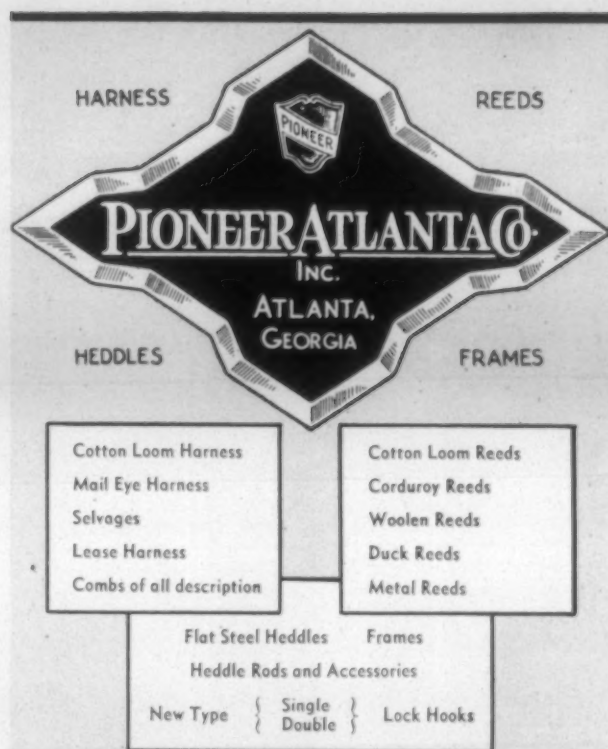
Fixed premiums also are established for perforated dye-tube and cross-tied skein put-up; for hard twist in various multiples; and for certain yarns spun to rigid specifications because of their use in army equipment. Premiums commensurate with additional material and production costs are allowed for other special put-ups; for slack twist; and for high-breaking strength yarns made with extra-long staple cotton. Sellers charging these latter premiums, however, are required to file monthly reports with OPA. Except for those specifically authorized by the schedule, no premiums may be paid or collected.

"Memorandum" contracts made with OPA's approval must now be settled at prices not exceeding those determined by applying the levels set in the amended schedule. In computing these prices, under the "sliding-scale" formula, parties to memorandum contracts must use the market price of "spot" cotton prevailing on the last business day preceding the date of the contract.

In lieu of the broad exemption covering export sales that has been in the schedule up to now, the revised schedule limits producers of combed yarn to a 5 per cent premium in the case of direct export sales; other direct export sellers are permitted to add to the maximum price an amount equivalent to the additional cost involved in the particular sale. Sales to a "middleman" for subsequent export take the ceiling price without any premium. If export shipments are put up in waterproof packaging, a premium of one cent per pound may be collected by any seller.

Domestic sales of yarn by others than producers also may command certain differentials, according to the revised schedule. When stock yarn is sold out of warehouse space of persons other than producers, freight may be charged to the buyer. Jobbers, who are defined so as to include only persons principally engaged in selling stock yarn, rather than in making commission sales, are permitted to charge limited premiums of from 5 to 10 per cent, depending on size of each sale and the quantity of yarn sold in each month.

Sellers are required to give a two per cent discount on all yarns sold at maximum prices where payment is made within 30 days of delivery. This conforms to well-established trade practice.



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GASTONIA, NORTH CAROLINA

Thieves Get \$100 At Mollohon Mill, Police Announce

Newberry, S. C.—The vault of the Mollohon Cotton Mill was broken into January 28th, and a revolver and approximately \$100 removed, Newberry officers said.

The lock on the outer door of the vault was broken and an unsuccessful attempt was made to break the combination of the safe within the vault, the officers reported. Entrance to the mill was made through a screen window.

City police are assisting Newberry County officers in the investigation of the burglary.

Southeastern Wool Industry

Is a textile industry based on wool and wool-mixed fabrics suitable for the Southeast? And is sheep raising feasible for the Southeast from the farmers' point of view? These related questions are considered and answered in a 56-page report, entitled *Wool Industry Prospectus*, just issued by the State Engineering Experiment Station at the Georgia School of Technology. The subject is of much moment to both the industrial and the agricultural interests of this region and already engages the attention of a number of enterprising manufacturers and progressive farmers. In the present report it is discussed with a clarity, a soundness of judgment and a wealth of factual information that should be of service to all who are seeking light and counsel on these fields of Southeastern opportunity. The authors of the *Prospectus*, Joseph B. Hosmer and M. A. Strickland, Ph.D., have done a piece of work highly creditable to themselves and to the State Engineering Experiment Station.

An increased use of wool in the textile industry of the Southeast "will naturally tend to increase textile employment," while the successful production of wool on the Southeastern farm "will provide means for using at a

profit land which is now idle or essentially so." Such results, of course, will add to the region's prosperity. It is highly important, therefore, to ascertain whether these two lines of development are economically feasible. The *Prospectus* presents ample data to show that they are, at the same time, interpreting the facts and figures in a thoroughly common-sensed and scientific spirit.

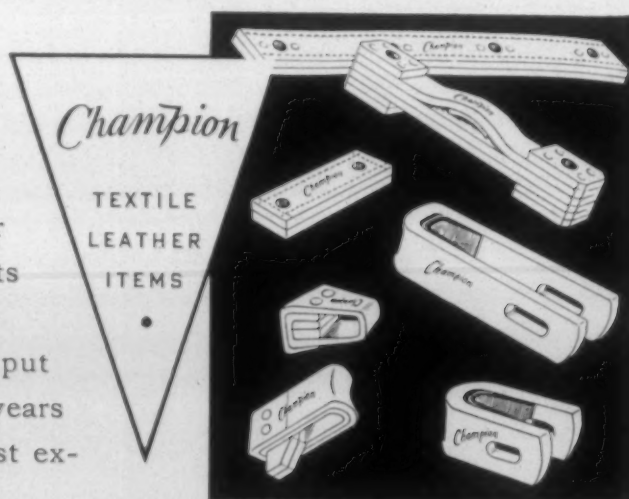
On the textile side of the inquiry it notes, for instance, that woolen mills in the Southeast in 1939 "spent \$365 and the average mill of the United States spent \$369 to produce finished products valued at \$465 for the former, and \$438 for the latter. These data show an average gross margin of \$100 for the Southeastern mills, and \$69 for the average woolen mill in the United States." Among the advantages of the Southeast in this connection are abundant labor and power, soft water for scouring wool, proximity to a great potential supply of "grease" wool (that is, wool as it comes from the sheep) and also to large supplies of raw cotton and rayon. The last mentioned fact is significant because of a growing tendency to process wool mixed with cotton and other fibers on regular cotton mill machinery—a thing which can be done with slight mechanical readjustments. "One Georgia cotton mill," we are told, "has recently converted its entire facilities to the production of wool and cotton-mixed yarn. All through the Southeast are aggressive cotton mills that are experimenting with the use of wool. Some have installed a small amount of wool machinery. They plan to participate from the beginning in this growing Southeastern wool industry." There are also signs that some New England manufacturers may move their woolen mills to this area.

The second question, Can wool be produced economically in Georgia and neighboring States? is also answered with a decided yes. Natural resources for sheep husbandry here are so abundant that probably 6,000,000 a year could be raised without infringing upon the production of other profitable farm commodities.

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1941 Textile Fiber Consumption Again Breaks All Records

Due to greatly increased war requirements, United States consumption of the four major textile fibers (cotton, wool, rayon and silk) again broke all previous records, states the current issue of the *Rayon Organon*, published by the Textile Economics Bureau, Inc.

Total consumption of the four major products aggregated 6,470,400,000 pounds as compared with 4,896,100,000 pounds consumed in 1940. The magnitude of these figures is strikingly revealed by the fact that the 1941 increase amounted to 32 per cent as compared with the previous year.

"The tremendous increase in textile fiber consumption during 1941," states the publication, "indicates the impact of military, naval, industrial and consumer demands for textile products which have arisen as a result of this country's transition from the twilight zone of war, peace and confusion to a war economy. Meanwhile industrial activity moved ahead, thereby creating a greater demand for textile products. Similarly the nation's purchasing power increased and the civilian consumer took advantage of bigger pay envelopes to buy more clothing, household furnishings and other textile products."

The consumption of raw cotton in 1941, as is natural, again led all other products, reaching a new all-time record of 5,207,200,000 pounds, an increase of 31 per cent over the consumption of 3,961,000 pounds reported for 1940.

Wool consumption in 1941 amounted to 652,200,000 pounds, or 54 per cent greater than the 21-year high of 422,400,000 pounds established in 1923. Of the 1941 total scoured wool consumption, 135,300,000 pounds represented carpet-class wool and 518,900,000 apparel-class wool. The favorable 1941 wool performance was due primarily to the Government's demand for wool textiles for the nation's fighting forces.

Rayon consumption in 1941 (yarn plus staple fiber) aggregated 586,000,000 pounds, another new high mark, surpassing the record previous year by 20 per cent. The demand for rayon during 1941 was primarily civilian in character. Consumption of rayon last year was three and one-half times as large as it was in 1931, a performance unequalled by any other textile fiber.

Approximately 25,000,000 pounds of raw silk were consumed in the United States last year, the smallest total since 1920. This figure, in part, is an estimate, as December silk deliveries to American mills was not announced. The low raw silk consumption last year was due to the cessation of imports from Japan during the last five months of the year and the subsequent reservation of the country's raw silk stocks for military and naval use only.

The following table shows 1941 consumption of the four main textile fibers as compared with recent years:

	(In millions of pounds)		
	1941	1940	1939
Cotton	5,207.2	3,961.7	3,629.7
Wool	652.2	411.1	396.5
Rayon	586.0	487.5	458.5
Silk	25.0	35.8	47.3
Total	6,470.4	4,896.1	4,532.0

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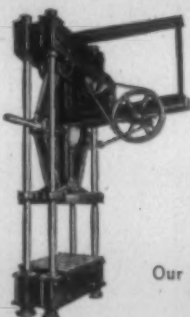
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Price Control Bill

(Continued from Page 9)

the four criteria mentioned above. Whether present ceiling prices of cotton yarns and cloth are in conformity with this provision has not yet been made a matter for official decision. But I am told informally by a member of OPA counsel that the escalator or sliding scale schedules now in effect are not restrictive in character and inasmuch as they are free to move upward with the price of cotton they do not prevent the attainment of the maximum ceiling price of raw cotton. This interpretation appears reasonable and probably will stand.

Although the Act defines the manner in which agricultural ceiling prices may be arrived at the Administrator may not fix such prices without the prior approval of the Secretary of Agriculture.

6. Buyers who purchase goods at prices which violate any price order are equally guilty with the seller.

7. Any of the powers and functions of the Price Administrator with respect to given commodities may be transferred by the President to any other agency of the Government having functions related to such commodities. Likewise, with the exception of agricultural commodities, the President may transfer to OPA any of the powers relating to priorities or rationing now exercised by any other agency of the Government.

8. The Administrator has full investigatory powers within the scope of his responsibilities. He may require written reports, make inspections, subpoena records, documents and witnesses.

9. Any person aggrieved by a price order or regulation may, within 60 days, file a protest. The Administrator is required to take notice of such protest by granting it or denying it, or receiving further evidence, or calling a hearing. In the event of denial he must state the grounds upon which the denial is based, including any economic data or other facts of which his office has taken official notice.

Following denial of protest an aggrieved person may file his complaint with the Emergency Court of Appeals authorized by the Act. This court consists of three or more judges appointed by the Chief Justice of the United States from judges of the District Courts and Circuit Courts of Appeal. If action in the Emergency Court of Appeals is unsuccessful the complainant may petition for certiorari appeal in the Supreme Court.

10. The Administrator is empowered to seek court injunctions to restrain actual or threatened violations of his orders. On representations made by the Administrator criminal proceedings against violators may be initiated by the Department of Justice and prosecuted in the district courts or, under certain conditions, in state and territorial courts.

11. The Administrator is given the power to issue licenses as a condition of selling any commodity subject to price regulation. The first violation on the part of the licensee calls for a warning notice sent by registered mail. A subsequent violation clears the way for the Administrator to petition a district court or the appropriate state court for an order suspending the license. The license may be revoked only by the court, and only for a period of twelve months, and the revocation is confined to the commodity or commodities in respect of which the violation is committed.

Planning for Fluorescent Lighting Maintenance

(Continued from Page 14)

which, in this instance, would occur at about the fifth month.

It is obvious that in installations involving large numbers of lamps such as are now being installed particularly in some of our new defense plants, the maintenance engineer must anticipate not only the average renewal rate but must lay his plans to handle the peak load when it comes.

When To Remove a Lamp

It should be noted that the fluorescent lamp blinks on and off when it reaches the normal end of life. This blinking is caused by the high voltage that develops in the lamp when the emission material is worn away from both of its electrodes. This high voltage causes the glow switch, normally used, to switch the lamp alternately on and off. Blinking should not be permitted to continue for more than an hour or so or the starters will be destroyed and perhaps the ballast will be overheated and damaged. This means that all of the above requirements, ready access to the fixture, proper fixture design for quick relamping and maintenance planning are especially important; otherwise, the switch damage and possible ballast damage will represent extra operating cost of the lighting system.

Special cut-out devices are now available to prevent the blinking from continuing beyond the danger point. The 85-watt, Type RF, lamp now requires no starter. Therefore, in certain instances this becomes an advantage from the maintenance standpoint of sufficient importance to be considered in planning the lighting installation.

Choice of Size and Type of Lamp

Naturally, the fewer the lamps used and the longer the lamp life, the less will be the lamp replacement problem. This would lead to the use of larger sizes of fluorescent lamps to reduce relamping cost. The 85-watt lamp has a 3,000-hour life and requires no starter so it is especially well suited for installations where relamping is difficult. The 100-watt lamp with its high output reduces the total number of units required for a given lighting job and is also well suited to large installations where lamp maintenance will represent a serious problem.

Group Replacement

Fluorescent lamps have, on occasion, been installed in fixtures with which relamping is extremely difficult and expensive. Some of the early fixtures, for example, required special tools and had to be partially dismantled in order to remove burned-out lamps and install the new ones. Also, some fixtures are located where access is difficult and where it is extremely costly to relamp and maintain the fixture. In such cases, group replacement, familiar to most lighting engineers in connection with incandescent lamps, should be used.

In practice, the simplest method is to replace all the lamps in the fixture or group of fixtures each time access is obtained. Those lamps which are not burned out may be used, if necessary, in other more accessible fixtures.

Group replacement may also be found to reduce the

(Continued on Page 56)

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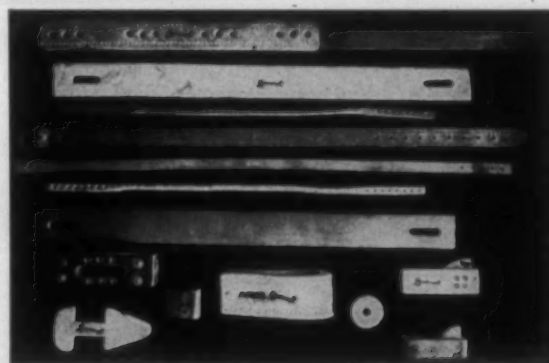


Illustration Shows a Few of the Different Straps Manufactured By Us

All of our textile leathers are manufactured from Oak Tan and Hairon Leather. Our Oak Tan Leathers are made from packer hides, selected for substance, weight and fibre strength. Our Hairon Leathers are made from foreign hides that are selected for textile purposes and are especially adapted for this work, owing to the extra length of the fibres.

We manufacture all types of textile leathers for cotton, woolen, worsted, silk and rayon looms.

Bancroft Belting Co.

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Boston, Mass.

Warehouse and Southern Distributor

CAROLINA SUPPLY CO.

Greenville, S. C.

Now--Cloth That Will Not Burn



Fabrics will soon be flameproofed, say Du Pont Co. chemists. They have worked out an economical process for making ammonium sulfamate, a former costly laboratory curiosity which is said to be a highly effective fire retardant that does not alter the appearance or "feel" of cloth. Draperies, blackout curtains, children's party dresses, mattresses, negligees, arc welders' overalls may be dipped in the chemical solution and dried, rendering them unable to burn as shown here.

New Fluorescent Starter Is Announced By Hygrade

A new line of fluorescent lamp starters, designed to protect ballast and starter and to eliminate the flashing of failed lamps, is announced by Hygrade Sylvania Corp.

Called the "Hygrade Premium Mirastat Starters," they are, according to Hygrade engineers, entirely different in principle from any other starters of the kind so far introduced.

Automatically opening the circuit when a lamp fails, the Premium Mirastats are especially suitable for installations that make immediate replacement of a burned-out lamp impractical.

Flashing on and off, a lamp that has failed may eventually ruin an ordinary starter. The Premium Mirastat not only protects itself, prevents abuse of the ballast and effects a substantial saving of power, but also does away with the usual annoying flashing of the burned-out lamp.

In addition to their special feature, Premium Mirastats contain all the regular features of the popular standard Mirastats. They will supplement the standard line and be slightly higher in price.

New Synthetic Size

A new type of synthetic sizing and finishing agent for textile yarns and fabrics is announced by Rohm & Haas Co., Philadelphia manufacturers of textile chemicals. Called Rhotex Size, the product is a water soluble resin and is described chemically as the sodium salt of polymerized acrylic acid. It is supplied as a concentrated paste which is easily dilutable.



Designed for the replacement of natural gums in sizing work, Rhotex Size is used in conjunction with a starch and also replaces a portion of the starch already employed. It is said to produce a much tougher and more flexible size and to reduce the starch's tendency towards shedding, thus resulting in more efficient weaving and better binding.

This new size is also being used successfully as a modifying agent for starch in sizing spun rayon, and has proved valuable in plasticizing domestic corn starches to give them the properties of imported root starches. It has proved to be an excellent thickening and binding agent for cotton warps.

In addition to sizing, this Rhotex can be used in many regular textile finishing operations, and when used with starch produces a more durable finish and binds the starch more closely to the fabric. It is also being investigated in the paper field in the preparation of coated fabrics.

Although research on Rhotex Size has been under way for some years, its commercial appearance during the time of shortage of foreign gums and starches will relieve many finishing difficulties, the manufacturers state. They also pointed out that the product, being of a synthetic nature, is therefore far more uniform than natural sizing materials.

New Motor Has

All-Around Protection

"The greatest motor improvement in years" is how Allis-Chalmers describes the "Safety-Circle" protection of its New Lo-Maintenance Motors. Specially developed to give the motor complete all-around protection, the "Safety-Circle" is a wide, solid rib—integrally cast as part of the frame—which forms an unbroken circle of protection around the stator.

All the experience of building motors for over fifty years has been concentrated in the development of this advanced product. One-piece cast frame and cast end-hields guard the motor from exterior knocks and abuse. A more liberal use of electrical materials makes this motor internally and electrically stronger because current and magnetic densities are less extreme. Improved bearing design delivers smoother performance with full-flow lubrication and easier maintenance. Additional cross strength has been built into the distortionless stator for maximum power efficiency. Rotor is



keyed to the shaft for strength, and its outer surface is turned for smoothness and an accurate air-gap. Other Lo-Maintenance features are oil drains at bottom of bearings for easy flushing, removable end-pieces and large conduit box for handy wiring.

The Lubriplate Film No. 2-41

The current *Lubriplate Film*, published by Fiske Bros. Refining Co., Newark, N. J., treats on a subject of vital interest to every manufacturer of machinery, namely, the proper lubrication of his machines by the users.

The bulletin explains how the Lubriplate identification tag works for both the machinery manufacturer and the superintendent of the plant in which the equipment is installed.

Worthite

Worthington Pump & Machinery Corp., Harrison, N. J., has recently published a booklet giving complete technical information on "Worthite," an improved and useful acid-resisting alloy steel for the chemical and process industries.

Worthite was developed in 1935 by the metallurgical engineers of the Worthington Corp. and the Lebanon Steel Foundry. It is a high-nickel, high-chromium molybdenum low-carbon alloy steel, containing 50 per cent iron.

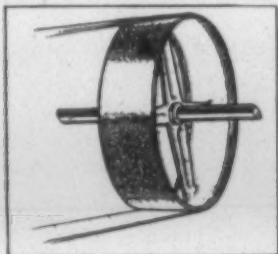
Meet Mr. Wilberforce



Walter Bluh, of Marvlo Fabrics, Inc., meets Wilberforce, new character created by American Viscose Corp. to appear in its 1942 advertising on Crown Tested rayon men's wear. William Stutts, of American Viscose, is doing the introducing.

Improved Pulley Covering

Condersite Corp., Richmond, Va., announces a recent improvement in its fabric material used in pulley covering to prevent belt heating and slippage and the use of belt dressing. Claims made for the material are as follows: efficiency of power transmission equipment is increased 10 to 30 per



cent; gives traction and eliminates friction, resulting in longer life to belts; adds gripping power and permits looser belts; less power is required; there is less wear on bearings and less belt repairing and renewals; the fabric is supplied to cover pulleys of all sizes, whether the composition is steel, cast iron, wood, paper or fiber. The belt is held in position on the pulley surface by a compound that impregnates the pulley composition. It is being successfully used by some of this country's largest manufacturers and industries.

"More Output for Defense"

The above is the title of an interesting 20-page booklet published by Reeves Pulley Co., Columbus, Ind.

The booklet, which is well illustrated, shows how the Reeves Variable Speed Control has solved problems in hundreds of industrial plants in various fields, arising from the change-over from peace-time to defense production, and the resultant necessity of doing new jobs on old machines.

Reyn-O-Cell

A new 16-page illustrated booklet entitled "Fabricated Insulation" has been issued by the Reynolds Metals Co., Richmond, Va., on their building product, Reyn-O-Cell. Made of cotton fibres (naturally water-repellent) and processed to be flame-proof and fire-resistant, Reyn-O-Cell insulation was developed in conjunction with the United States Department of Agriculture. It is being used extensively in defense housing projects. The booklet describes the new insulation in detail and the various forms in which Reyn-O-Cell is available.

The Scanner

United Cinephone Corp., of Torrington, Conn., announces a new product, the Scanner.

The Scanner consists of a light source and two photo-tubes in a single, compact, housing, ready for attachment to any sensitive photo-electric amplifying system.

It is used wherever photo-electric control is desired from a reflecting surface two inches or less distant from the unit.

Typical applications include: Registration control from marks imprinted on materials such as cellophane, light or heavy opaque papers, cloth or metals; sensitive cut-off from contrasting colors on similar materials; operation, through glass, from a meter pointer for underload or overload alarm; or from a scale pointer for automatic batch weighing; counting watt hour meter revolutions.

Literature is available on the Scanner.

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We suggest that you have your aprons either replaced or repaired now. Copper rivets, burrs, steel spikes and pins are harder to get each week, so telephone, wire or write us your needs. Ship your aprons to us for repair. Our motto, "Better Built Picker Aprons" guarantees your satisfaction.

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1941 Rayon Production and Consumption Again Breaks All Records

New all-time high records for both production and consumption were "the order of the day" for all divisions of the United States rayon industry during 1941, according to records compiled by the *Rayon Organon*, published by the Textile Economics Bureau, Inc.

Both consumption and production of rayon filament yarn were essentially equal in 1941, because demand was limited entirely by what the industry could produce. Stocks of rayon yarn in the hands of producers both at the beginning and at the end of 1941 amounted to only a few days' supply.

Total domestic production of rayon (yarn plus staple fiber) in 1941 amounted to 573,230,000 pounds, an increase of 22 per cent over the previous record of 471,170,000 pounds produced in 1940.

Rayon filament yarn production alone amounted to 451,204,000 pounds, or 16 per cent greater than the 1940 output, the previous record. Both the viscose-cuprammonium and the acetate branches of the industry achieved new production records of 287,459,000 pounds and 163,745,000 pounds, respectively.

The 1941 domestic production of staple fiber at 122,026,000 pounds compared with an output of 81,098,000 pounds in 1940, an increase of 50 per cent. Marked gains were recorded in the production of both viscose and acetate staple fiber.

U. S. Production By Years

The following table shows the domestic rayon filament yarn and the rayon staple fiber production by years (in millions of pounds):

	Rayon Filament Yarn	Rayon Staple Fiber	Total
1941	451.2	122.0	573.2
1940	390.1	81.1	471.2
1939	328.6	51.3	379.9
1938	257.6	29.9	287.5
1937	321.7	20.2	341.9
1936	277.6	12.3	289.9
1930	127.3	0.4	127.7

Because of the war, production information from foreign countries has been very meager, states the *Organon*. As a result, it is not possible to give any reliable estimate on 1941 world rayon production, as had been customary in former years.

U. S. Consumption Up 20 Per Cent in 1941

Domestic consumption of rayon in 1941 reached a new all-time high total of 586,016,000 pounds, an increase of 20 per cent over the previous 1940 record. Of this total 452,390,000 pounds were rayon filament yarn and 133,626,000 pounds represented rayon staple fiber available for consumption (domestic production plus imports). The 1941 consumption of rayon filament yarn was 16 per cent above the previous record set a year ago.

Stocks of rayon filament yarn in the hands of rayon yarn producers aggregated 3,800,000 pounds at the close of 1941 as compared with 6,300,000 pounds held as of December 31, 1940.

The principal change in the distribution of rayon fila-

ment yarn from 1940 to 1941 occurred in the yarn shipped to the hosiery industry. The greater use of rayon yarn here resulted from the cessation of raw silk imports from Japan in August and subsequent events which led to the present silk substitution program whereby rayon yarn is allocated to former silk users. In 1941 there were 26,000,000 pounds of rayon filament yarn consumed by the hosiery industry, of which 9,000,000 pounds were consumed in the full-fashioned division and 17,000,000 pounds were consumed in the seamless division of that industry.

Mathieson Alkali Works Fiftieth Anniversary

The Mathieson Alkali Works, Inc., producer of bleaching agents and other chemicals used in the textile industry, is observing its fiftieth anniversary. The company was incorporated in Virginia in 1892.

With plants in Saltville, Va., Niagara Falls, N. Y., and Lake Charles, La., Mathieson is one of the major producers of alkalies, chlorine, synthetic ammonia, and numerous other products. At present, all three plants have been geared to maximum production to supply chemicals vitally necessary to our all-out war effort.

Atlantic Rayon To Make Nylon Parachutes

The Atlantic Rayon Corp., of Providence, R. I., announces the formation of a new company to manufacture nylon parachutes. The company, known as the Atlantic Parachute Corp., is setting up a plant in property owned by Atlantic Rayon in Lowell, Mass. While it will be a new and independent unit in its field, arrangements have been made with the Pioneer Parachute Co., Inc., of South Manchester, Conn., one of the outstanding manufacturers of 'chutes, to give the new company the technical and engineering assistance necessary to organization. Atlantic Rayon Corp.'s directors have authorized the investment of \$100,000 in the new company to provide the equipment necessary for this manufacturing operation. It is anticipated that working capital requirements will be provided through cash advances made by the Government with each contract received. Parachute work carries at present a priority rating of A-1-A. Contracts for sewing machinery and other equipment have already been placed and key personnel for the new company are being picked out and are receiving preliminary training at Pioneer's plant in Connecticut. The first machinery is expected to arrive within two or three weeks and deliveries should be completed within three months. If the equipment installed is operated on a continuous 24-hour basis the plant should employ 1,000 people.

New equipment has been purchased for Atlantic Rayon's Lowell plant for twisting, sizing and packaging nylon yarns to be used in parachute canopy cloth. After the war this new equipment will be used for twisting, sizing and packaging nylon yarns for the full-fashioned hosiery and weaving trades.

At Providence Atlantic Rayon is doing nylon twisting for shroud lines, twisting and packaging of nylon sewing threads and twisting and packaging of nylon yarns for tapes, all of which are used in the manufacture of nylon parachutes.



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PLEDGE FOR 1942

The war has placed extraordinary demands and responsibilities on Tanners and producers of Curried Leather.

Shingle & Gibb Leather Co. gladly assume, and hereby pledge, their very best efforts to meet to the fullest extent of their ability their share of this responsibility, particularly as applied to the great Textile Industry.

This covers Penn-Tan Leathers . . . also our large production of Curried Leather for Belting Manufacturers.

Not only will every effort be made to produce a sufficient amount of Leather for your requirements, but in addition we pledge there will be no relaxing of our research efforts to the end that our products may be better suited to meet your demands.



Shingle & Gibb Leather Co.

PHILADELPHIA

Planning for Fluorescent Lighting Maintenance

(Continued from Page 51)

overall lighting cost if applied to an entire lighting system where access to the fixture is an appreciable cost item or where it is vital that a minimum number of lamps be inoperative at any one time. Operating under such a plan, a maintenance engineer would anticipate the approximate time of maximum replacement. Such a time could be estimated from the discussion above particularly with the replacement rate curve in Fig. 4. For good results, the lamps should be replaced shortly before the period of peak mortality or peak replacement. In this

case, the lamps that are removed before failure can be used elsewhere or destroyed, depending upon conditions.

Conclusion

If good lighting at minimum cost requires easy and regular maintenance and preparations are made ahead for relamping, considering the peak as well as the average replacement rates, then long range lighting satisfaction will be assured.

Recommended Illumination Levels for Textile Mills

The illumination tables listed below for textile mills is the result of recent findings and observations by the Westinghouse Lamp Division, Bloomfield, N. J.

It is based on the scientific fact that existing foot-candle levels should be at least doubled if measurable and significant improvements in seeing are to result. In addition, the new recommendations give full weight to the improvements in old light sources, the high efficiencies of the new, and the ever downward trend of lighting costs as a result of all these improvements. The values shown should be provided on the work or other area regardless of whether in a horizontal, vertical or oblique plane.

Activity	Foot Candles
Textile Mills (Cotton):	
Opening, Mixing, Picking, Carding and Drawing	10
Slubbing, Roving Spinning, Spooling	20
Grading	100
Warping on Comb	30
Beaming and Slashing on Comb—	
Grey Goods	20
Denims	100
Inspection—	
Grey Goods (Hand Turning)	50
Denims (Rapidly Moving)	200
Automatic Tying-in, Weaving	50
Drawing-in by Hand	100
Silk and Rayon Manufacturing:	
Soaking, Fugitive Tinting, and Conditioning or Setting of Twist	10
Winding, Twisting, Rewinding, and Coning, Quill- ing, Slashing	30
Warping (Silk or Cotton System)—	
On Creel, on Running Ends, on Reel, on Beam, on Warp at Beaming	50
Drawing-in—	
On Heddles and on Reed	100
Weaving:	
On Heddles and Reeds	10
On Warp Back of Harness	20
On Woven Cloth	30
Woolen:	
Carding, Picking, Washing, Combing, Twisting, Dyeing	10
Drawing-in, Warping—	
Light Goods	20
Medium Goods	50
Dark Goods	100
Knitting Machines	20

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Development of Anti-Crease Process Study Of Cotton Card Speeds Discussed in Textile Research

Development of the first successful process for rendering cotton and rayon fabrics resistant to crushing and creasing, and the unexpected results obtained when card speeds were increased during a recent investigation of cotton carding, will be discussed in the January issue of *Textile Research*, official publication of Textile Research Institute, Inc., and of the Textile Foundation. Brought to a commercial stage after fourteen years of research by Tootal, Broadhurst & Lee Co., the crush-resistant process was rapidly adopted in Europe and in this country for treating cotton and rayon dress goods, spun-rayon suitings, and other apparel fabrics. Further, it led to a major change in textile processing techniques—the utilization of various types of synthetic resins in warp sizing, in dyeing and printing, and in finishing to obtain new and improved finishes previously unknown to the industry.

An increase in cotton yarn strength was the unexpected result obtained in a number of mills when card speeds were raised. No theory has been evolved as yet to explain this phenomenon, which was reported at a recent meeting of the Southern Textile Association by Prof. George A. Dunlap, director of the research program being carried out by the S. T. A. and The Arkwrights under sponsorship of the Textile Foundation. In one mill, for example, when card cylinder speeds were raised from 172 to 196 R.P.M. to increase production, it was found that yarn strength increased from 61 to 64.

Among other features of the January issue of *Textile Research* will be an article, "Research is Vital," by Alban Eavenson, a director of Textile Research Institute; description of an improved method for preparing cellulose solutions for fluidity measurements; and a report of an investigation of the properties of wool flannels made from new and reprocessed wool.

E. E. Palmer, Textile Specialist, Retires

E. E. Palmer, of the General Electric Co., long noted for his pioneering work with the textile industry, retired on January 9th from active participation in business at Boston, Mass. G. D. Godard, his assistant since 1935, has now become district supervisor of textile activities.

An associate of Sidney D. Paine, Mr. Palmer was closely identified with the earliest applications of electric power to the unusual requirements of the textile industry. He was one of the first to see the possibilities of the individual motor drive for looms. Mr. Palmer was instrumental in electrifying many of New England's most prominent textile mills, which had previously depended on steam or water for their power requirements. He has always been in close contact with practically every major development of the industry.

Shortly after graduating from the University of Maine in 1899, he joined the General Electric Co., with whom he has been identified ever since. After a short period in their factories, he came to the Boston office in 1906 as textile specialist and engineer. He is a member of the National Association of Cotton Manufacturers and the Textile Exhibitors Association.

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MARCH 1st

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showing how accidents oc-
cur in Textile Mills and how
they can be prevented . . .

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in *TEXTILE BULLETIN*. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ACME STEEL CO., 2888 Archer Ave., Chicago, Ill. Sou. Office and Warehouse, 803 Stewart Ave., S.W., Atlanta, Ga., F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrell, 323 Clairmont Ave., Decatur, Ga., Phone Dearborn 6267; Frank G. Gorman, 1617 Beverly Drive, Charlotte, N. C., Phone 3-3293; G. R. Easley, 107 Manly St., Greenville, S. C., Phone 1610; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn., Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La., Phone Magnolia 5539. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

ALLEN CO., 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C. Hugh Puckett, Sou. Sales Mgr. Reps.: John D. Hunter, E. H. Driver, Paul F. Haddock, Charlotte Office: E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Button, 610 N. Mendenhall St., Greensboro, N. C.; C. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

AMERICAN VISCOSE CO., 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C. Harry L. Dalton, Mgr.

ARKANSAS CO., Inc., P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

ARMSTRONG CORK CO., Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C. J. V. Ashley, Sou. Dist. Mgr.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Chester L. Eddy, Asst. Sales Mgr., 903-904 Woodside Bldg., Greenville, S. C. Sou. Reps.: W. Chester Cobb, Erwin Laxton and Reid Tull, Charlotte, N. C., office: John H. Graham, Box 904, Greenville, S. C.; Harold T. Buck, 1613 12th St., Columbus, Ga.; John R. Brown, Trussville, Ala.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

ATWOOD MACHINE CO., Stonington, Conn. Sou. Rep.: Fred Sails, Johnston Bldg., Charlotte, N. C.

AUFFMORDT & CO., C. A., 2 Park Ave., New York City. Sou. Rep.: George B. Wilkinson, 613 Johnston Bldg., Charlotte, N. C.

BAHNSON CO., THE, Winston-Salem, N. C.

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BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARNES TEXTILE ASSOCIATES, Inc., 10 High St., Boston, Mass. Sou. Office, 511 Johnston Bldg., Charlotte, N. C.

BAY STATE TEXTILE CO., 220 Hartwell St., Fall River, Mass. N. C. Agt., John Graham Webb, P. O. Box 344, Hillsboro, N. C., Phone 127-B.

BECCO SALES CORP., Buffalo, N. Y. Sou. Reps.: J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

BEST & CO., Inc., EDWARD H., Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga., Phone Dearborn 5974; Ralph Gossett, William J. Moore, 15 Augusta St., Greenville, S. C., Phone 150.

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CIBA CO., Inc., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouses, Charlotte, N. C.

CLINTON CO., Clinton, Iowa. Sou. Reps.: Luther Knowles, Box 127, Phone 2-2486, Charlotte, N. C.; Grady Gilbert, Box 342, Phone 3192, Concord, N. C.; Clinton Sales Co., Inc., Geo. B. Moore, Box 481, Phone 822, Spartanburg, S. C.; Boyce L. Estes, Box 325, Phone 469, LaGrange, Ga.; Gordon W. Enloe, P. O. Box 351, Gadsden, Ala.; Harold P. Goller, 900 Woodside Bldg., Tel. 3713, Greenville, S. C. Stocks carried at Carolina Transfer and Storage Co., Charlotte, N. C.; Consolidated Brokerage Co., Greenville, S. C.; Bonded Service Warehouse, Atlanta, Ga.; Textile Products Distributing Co., Rock Hill, S. C.; Industrial Chemicals, Roanoke Rapids, N. C.

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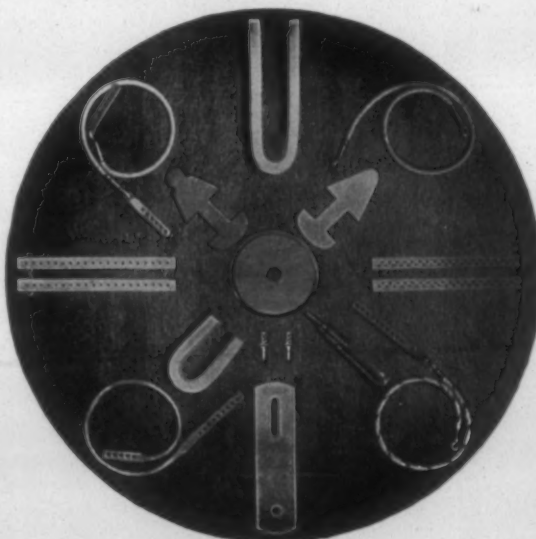
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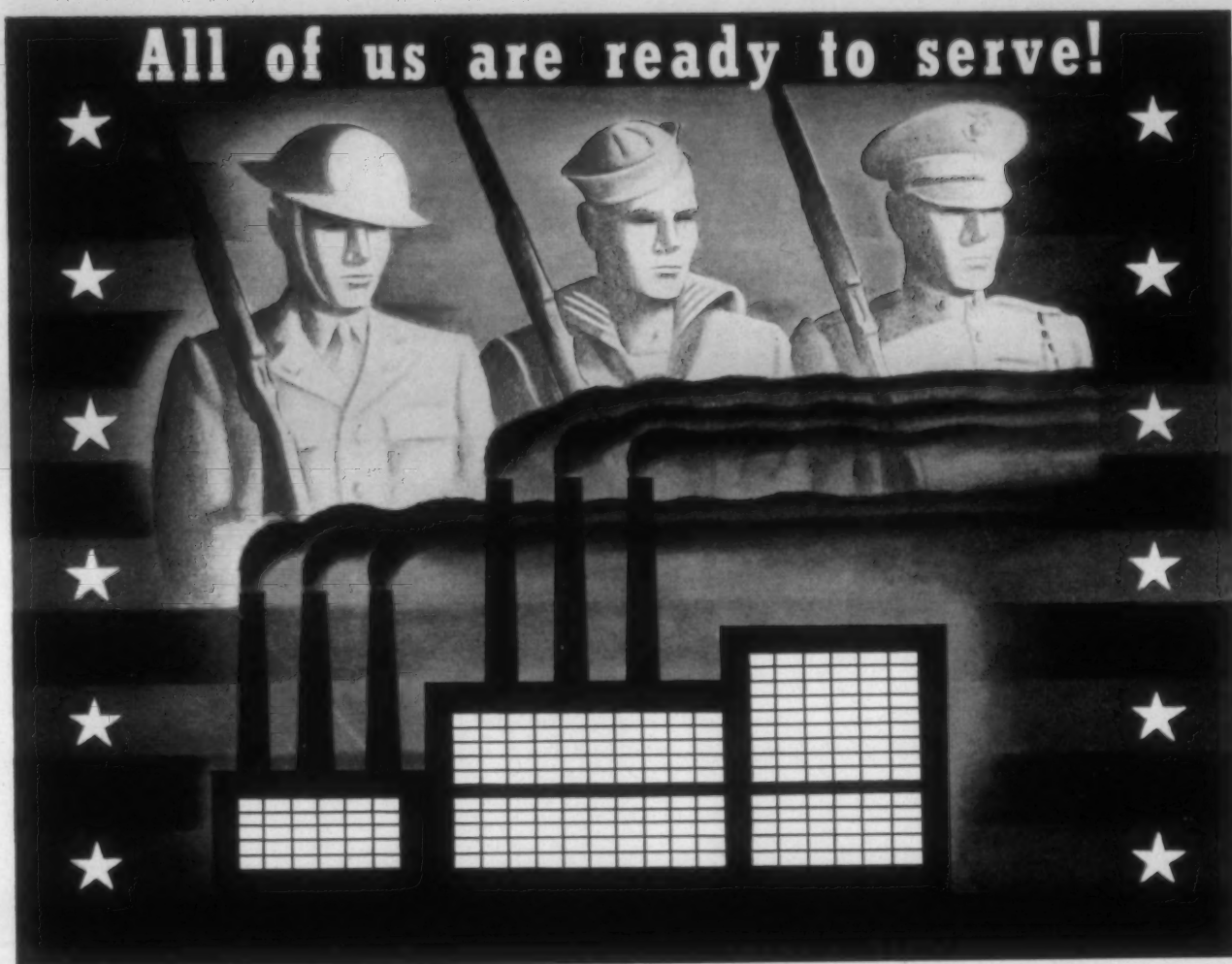
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